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OSBORNE

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OSBORNE REORGANIZATION PLAN CONFIRMED BY COURT

Hayward, California, June 15, 1984 -- The Plan of Reorganization for Osborne Computer Corporation was approved today in the United States Bankruptcy Court in San Francisco, California by Judge Jack Rainville.

With today's confirmation of the Plan, Osborne has cleared the last hurdle for a successful reorganization. The confirmation is the end result of the creditor voting process where every creditor was given the opportunity to vote on the Plan of Reorganization. Effective with the confirmation of the Plan, Osborne becomes a new company. The Plan calls for the creditors to receive \$15.5 million and 20% of the stock of the new company. Corporate Controller, Mike Anthofer, indicates that the \$15.5 million debt has already been paid down to less than 9 million, and the remainder will be paid off within 15 months of the effective date of confirmation.

Ronald J. Brown, President of Osborne Computer Corporation, said, "The reorganization of Osborne is of industry importance. It represents a turning point in the recent wave of unfavorable publicity that has beset the computer industry. Our team has set realistic goals for the reemergence of Osborne as a healthy and viable company. Even though only a small percentage of companies ever come out of Chapter 11, we did it, and in record time. We worked hard to maintain the complete cooperation of the banks, creditor's committee, user's groups, and the Osborne worldwide distributors. It's been a real team effort."

Osborne is actively looking for investment capital for multiple new product development and introduction. Osborne has over 35 distributors worldwide and sells in over 80 countries.

□

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BUILD ON ITS GOOD NAME.



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Letters

Your article in the April/May PC was most interesting as I was just to a point in my computer use to need to transfer data just the way you describe. Thank you!

I have a small problem though... When I try to load my dBASE-created file into SuperCalc, I can't seem to get it in. You say on page 32 (paragraph five, line four) to use the "/X eXecute command." Although I'm still a little bit of a rookie with SuperCalc I don't find any command "/X." I wonder if you have a later version of SuperCalc? Mine is version 1.05.

This is a real hurdle in getting my program to work. Thanks for your help in this matter.

Jim Riggle
Gladstone, OR

You can use the SuperCalc /X command to run an "execute file" of typed commands mixed with data. The file-name must have the extension ".XQT" and the typed commands and data must be in the ".XQT" text file exactly as it would have been typed at the keyboard. You can create the ".XQT" file using a word processing program or using SuperCalc. The SuperCalc manual (version 1.1) supplied by Sorcim has a complete description on page 9-15 through 9-16. It is also described in the newest Osborne 1 User's Reference Guide (by Hogan and Iannamico) on page 224.

Drive-C Review

I have just finished reading the review of "Drive-C:" by Don Kranz in the April/May issue of *The Portable Companion*. I feel this review grossly understates the fine accessory that the Drive C: really is. I have been a heavy user of a 384K Drive C: unit for a year and have found it to be an invaluable tool that has



served me without any hassle for 8 to 14 hours a day in the whole gamut of use... from word processing to database management.

Mr. Kranz implied that user support was poor, and I have found just the opposite to be the case. My inquiries both before and after purchase were promptly answered. Mr. Kranz failed to mention the reduced wear and tear on floppy disk drives, a very important factor in disk access intensive applications. His comment regarding "quick power transient can trash the entire disk" is valid; however, this is where basic data processing "smarts" would apply regardless of the storage media.

In conclusion, I heartily endorse the Drive C: unit, and am convinced that any user that spends an hour or so with one would follow suit.

Jon M. Landers
Seattle, WA

I have your edition of April/May 1984, and am pleased to see a revival of your excellent magazine. However, the "Drive C: Review" article (p. 44) was in my opinion grossly inaccurate and misleading.

I bought the large size Drive C: for my Osborne last November. It has literally transformed the machine. While it is true that the load cycle can be mildly tedious, the rewards once you have loaded are remarkable. In WordStar in particular, the terrible and tedious delays while the program is being summoned and when overlays are invoked are eliminated,

which not only speeds the operation up, but also reduces the human irritation. While your author commented on the gain in speed, he pooh-poohed it as immaterial, which it isn't particularly if you have to go from WordStar from program test and back again repeatedly.

As a heavy user of dBASE II, I find that the larger Drive C: lets me have my data bases, massive programs, dBASE II itself, and WordStar all resident at the same time. This lets me edit, run, and edit again as the programs get written, a process which would be intolerably slow without the Drive C:.

I deal with the problem of transients in my production programs by causing each data base record that is produced in the course of input to be duplicated onto the floppy as soon as it is made. Thus, the calculations, look-ups, sorts, indexing, etc., are all done in the RAM disk, and it is only the formal recording which invokes the old fashioned mechanical disk.

A.H.C.Lewis
Toronto, CN

Congratulations on getting the first issue of *Portable Companion* out in such fine form in so little time. It looks good and reads well.

We will get you a Drive C: unit next week sometime so you can give it a try.

To reiterate what I mentioned about the Don Kranz review reprinted from the Twin Cities Osborne Group July '83 newsletter in the April/May '84 *Portable Companion*...

Mr. Kranz received an early prototype version of Drive C: to test in his Osborne 1. At the time he wrote his review article of this unit only four such prototypes existed. Drive C: production did not begin for another month and a half.

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A magazine in two weeks. It seemed like an impossible task. We were already understaffed on our other magazine, *User's Guide*, which of course had a schedule that conflicted with this magazine.

Yet personal computers, in this case Osborne 1 computers, can work miracles. So can some of our writers. They still had articles on Osborne disk waiting to be published when the axe fell. They graciously sent revised versions. And with the work of former editors Jackie Rae and Denise Caruso, we had a head start on preparing the editorial content.

At OCC, Kathy Ayotte and Debra Letts handled advertising, while Chodi McReynolds managed the business of publishing. All had no prior experience with publishing, yet they worked miracles to get the April issue out.

But the ever-crunching schedule fell squarely on the shoulders of one person, Lon Shoemaker, who single-handedly pasted the mechanicals together to form a magazine. Lon carried the ball over the goal line.

The end result was somewhat rougher in appearance than a typical *Portable Companion*, but for some reason, Osborne users didn't mind. They responded enthusiastically, and we are back again with a much better magazine.

We decided to change a few things for this issue. After getting together with Chodi McReynolds, Vice President of OCC, and Gale Rhoades, Executive Director of the First Osborne Group (FOG), we decided upon a new typeface for the text of articles and for examples.

The new example typeface is *mono-spaced* (each character is the same width as the other characters), which lets us present examples with clarity and precision. The bold version is used for commands or words you would type at your keyboard, and the regular version is used for system displays and messages. The special symbol `↵` stands for the Return key, and the symbol `^` stands for the Control key (similar to what is displayed on the Osborne screen).

We hope these typeface changes will help make *Portable Companion* articles easier to read and understand. Our goal is to use appropriate types and graphics to present the information. Let us know what you think: write to the editors directly at *Portable Companion*, PO Box 5384, Redwood City, CA 94063.

Thank you for supporting *Portable Companion*. We'll do our best to serve you.

Tony Bove & Cheryl Rhodes
June 15, 1984

Review of NewWord

NewWord is a replacement for WordStar/MailMerge.

As a long-time Osborne 1 user, I am very familiar with WordStar/MailMerge. So an ad for a word processor making the claim that "ANYONE FAMILIAR WITH WordStar CAN USE NewWord/MergePrint IMMEDIATELY, AND ENJOY SUPERIOR PERFORMANCE AND EASIER INTERACTION — AT ABOUT ONE-THIRD THE COST OF WordStar/MailMerge" got my attention. Is it worth buying a \$250 word processor, when you got WordStar for free? I think so.

NewWord is an enhanced WordStar. Most of the biggest complaints that I've heard about WordStar have been addressed. I couldn't find anything about NewWord that I didn't like. The only way to judge for yourself is to try it; the next best thing is a feature-by-feature comparison.

One great plus for NewWord is the Undo (Control-U) command. The number of times that I could have used this feature with WordStar are innumerable. It won't cancel every mistake you ever made, but it will recall the last edit you did. This means that when your fingers slip and you hit Control-Y (delete the line), instead of Control-T (delete the word), you can recover the deleted line.

Control-U saves the last deleted characters, words, lines or blocks, and you can insert the last deletion at the cursor location in your text. Using this feature you can move words around by deleting them and then moving the cursor to the new spot and doing a Control-U. This same thing could be accomplished by doing a block move, but it is much easier to use Control-U when you only need to move one word or group of words. The size of the buffer for your deleted text can be changed by re-installing the program. Initially it is set at 100 characters.

Installation

In installing the program, NewWord has the advantage over WordStar. Installing WordStar and doing modifications by patching memory locations is a hassle! NewWord's installation program has menus to select popular printers that NewWord can do special effects with.

by Cheryl Peterson

© 1984 Cheryl Peterson
New Word is a trademark of Rocky Mountain
Software Systems.

This article first appeared in *Computer Shopper*.

The installation program takes no time at all to run, and changing the default values of the features is easy. For instance, any of these features can be set in the installation program:

- Help level (1-4)
- Word wrap (on/off)
- Right justify (on/off)
- Insert mode (on/off)
- Hyphen help (on/off)

Many of the printing options can be changed in the installation program as well. The margins, page length, line spacing, and tab defaults can all be set in advance. Almost everything that is a pain to adjust in WordStar can be changed easily with NewWord's installation program. There are help menus, if you want them, every step of the way. If there is any parameter that you aren't sure whether or not to change, check the help messages.

For those who have problems with long files in WordStar, NewWord has another great feature. You can set up one of your NewWord work disks to save files without creating a backup file. This gives you a bit more room to work. Of course, if you choose to do editing this way, you should work on a backup copy

NewWord allows users of Osbornes with 52-column screens to see everything in the menus without scrolling around!

of your disk.

Another important consideration, in this area especially, is documentation. No matter how good an install program is, if you couldn't find out how to use it, it would be a total waste. The documentation, when combined with the help menus in the install program, explains everything you need to know.

Since the install program can be run any number of times, you can experiment with it for a while, and then change the settings you don't feel comfortable with. If there are several things that you want to change as soon as you start up, it would probably be a good idea to change them using the installation program.

Documentation

As to the documentation in general, it is very good. It takes a step-by-step tutorial approach. For beginning word processor users, this is undoubtedly the best method to learn all the capabilities of a program.

The "NewWord Encyclopedia," which follows the tutorial section, lists most common terms, their meaning and their use. This is a very handy section for finding out all the options for a particular command.

For instance, the section on line spacing tells you that you can set line spacing at single, double or triple. It tells how and lets you know that it can be changed in the installation program as well. It also reminds you that doing so would change the value at start up.

Another plus is the pocket reference guide. With the distinctive NewWord logo on it, it is quite attractive to have lying around your desk. It is also quite useful. Even experienced users sometimes forget little-used dot commands and mail-merge functions.

The only complaint I have about the

documentation is that an experienced WordStar user doesn't want to wade through all that information just to find out what's different. With very few exceptions the commands are the same. A short chapter on these differences would let WordStar people get right to work. For those who are interested, here's the gist of it.

Differences Between NewWord and WordStar

Control-N does not insert a hard carriage return. You have to go to insert mode and press Return. Instead, this command enables auto-indent in non-document mode. This programmer's feature automatically indents every line until you turn it off. It is activated by tabbing in to the point where you want your lines indented. Pressing Control-N causes every line to begin at that space. Pressing Control-N again turns it off. Pressing Control-N in document mode just puts your cursor to the beginning of the next line.

Another added programmer's convenience is variable tabs in non-document mode. In WordStar you're stuck with tabs every 8 spaces. In NewWord, you are stuck with being able to change them to every 2, 4, 8, or 16 spaces.

When entering your file name at the no-file menu the editing commands act the same as in a file with insert mode on. Backspacing does not erase the characters that are there. Also, if NewWord doesn't find your file name, it will ask if it should create the file. This means that if you've made a typographical error, you don't get sent into a file you don't want. It is easier to type N to return to the main menu, than to have to wait while it creates the file before doing a Control-KQ to get out of it.

When running a program from the no-file menu, NewWord does not automati-

cally check the other drives to find the file. This means that if you have your program on the A drive and your text on the B drive, you have to type A:programname B:. Since the only program I use regularly is X.COM, I put the whole command line on a function key.

For those who have programmed their function keys for WordStar, some of your old settings might not work. You'll need to change the "save and re-edit" one. NewWord has a major improvement in this area. When NewWord comes back after saving the text in the file, it puts you back in the same spot in the text (unlike WordStar, which puts you at the top of the file). The old WordStar Control-QP command is, in NewWord, "find a page."

Another favorite of regular WordStar users is the Control-QQ-Control-B set. For those who are lost, this is the command that lets you realign your paragraphs. When you insert text, you need to reformat to the end of the paragraph, which is the Control-B command. If you change your line spacing or margins, Control-QQ followed by Control-B reformats from the cursor to the end of the file. If you press the space bar along the way, it will stop.

In NewWord this has been condensed to Control-QB. To me, it makes a lot more sense. If you want to stop anywhere along the way, you use Control-U. The Control-QQ command has been done away with altogether.

Another thing that is different is the help levels. Like WordStar, NewWord has four help levels. Instead of using Control-JH to change the help level, you use two Control-J commands. The first Control-J displays the help menu. The second Control-J prompts you for the level number to change it to. Why they chose to change this I don't know. It seems no easier nor any more difficult.

One warning! For those who are accustomed to changing your working diskette from within WordStar and then using the file directory on/off toggle to reset the drive, DON'T. It doesn't work. If you want to change the diskette, you need to change the logged drive from itself to itself.

That pretty much covers the editing features that are different. As with WordStar, the cursor can be moved from

word to word, to either ends of lines or one character at a time. Deleting comes in the same options. Using the blocking commands, you can move, copy or delete sections of text. Using print control commands, text can be printed in bold-face, with underscoring and doublestriking, in an alternate pitch (10 or 12 cpi), with sub- or superscripts or in combinations thereof.

Printer Features

Herein lies one of the beauties of NewWord. Any new user of WordStar soon learns of the hassles of printer patches. It is marvelous what you can do with a printer, if only you can figure out how to make the dumb thing understand. NewWord shows you how.

While in the installation program, you choose the option to pick a printer. This printer then becomes your default printer. Unless you tell it otherwise it will assume you are using a simple draft quality printer, i.e. dot matrix. Most dot matrix printers will be able to understand this setting. There is also a setting for generic typewriter printers.

If you own a better-known printer, dot matrix or daisy wheel, there's a special setting for it. These printers include Diablos, Qumes, Epsoms, Okidatas, Silver Reeds, C. Itohs and Mannesmann Talleys. When you are printing a document, you can choose one of them as an option. If you enter its name, the program will enable the nicer print options. A handy suggestion is to use one of the simpler options for draft printouts. Then use the fancier one for a really nice copy.

Besides choosing the type of printer you want to use, you can choose to print more than one copy. Instead of having to use the merge print mode to print several copies, you can do it in regular print mode.

Did I mention that NewWord includes a merge-print function? Sorry. It has all the same dot commands and everything, but it doesn't cost extra. One thing about this package, they give you your money's worth.

Conclusion

I have to admit that I didn't expect NewWord to live up to its promises. I also didn't think I would ever switch word processors. I wrote this article with NewWord. It will be the first of many, I suspect. The advantages far outweigh the disadvantages. (What disadvantages?). I highly recommend this one. It has everything.

"Everything" includes a 30-day defective media replacement, 90-day telephone support and one year support by mail. Microcomputer Training Corporation, an independent company, provides support at a toll free 800 number for the first week. If you want to continue telephone support after the 90-day period, they charge \$45.00 an hour. There is also a telephone support contract available for \$50.00 a month. Not many software companies have half as much support.

My favorite feature is an Osborne-specific one. NewWord allows users of Osbornes with 52-column screens to see everything in the menus without scrolling around! For those of you with 80-column screens, this probably seems trivial. To us with non-standard widths, it is a true blessing.

NewWord
Rocky Mountain Software Systems
1280-C Newell Ave., Suite 1000
Walnut Creek CA 94596
(415) 680-8378
\$249.00

One great plus for NewWord is the Undo command. The number of times that I could have used this feature with WordStar are innumerable.

PRINTERIZETM YOUR WORDSTAR[®]

Why?

- * So you have easy access to all your printer's capabilities from inside of WordStar.
- * No need to run a BASIC program to set-up your printer.
- * Helps you save your sanity from trying to figure out how to patch WordStar yourself or from magazine articles.

Printerizers go far beyond those magazine patches, using an installer that is VERY easy to run. They add from 0 to 5K to WS.COM, depending on the printer selected. The specifics of what will be gained vary from printer to printer, but they all have the same goal in common:

"Give the user easy access to every useful capability of his printer."

Some Printerizations (notably Epson and Gemini) require HexPrintR to access some of the printer's less frequently used options. Call or write (specifying your printer) for details.

HexPrintR[™] changes the WordStar printer control character ^R into a "Hex-Printer" function. For example:

^R 10, 15, 20 ^R

in a file printed by WordStar with HexPrintR installed into it would send the same thing to the printer as the BASIC program statement:

LPRINT CHR\$(10); CHR\$(15); CHR\$(20);
 (Not recommended for daisy wheel printers)

PRINTERIZERS ARE AVAILABLE FOR:

- | | |
|---|---|
| <input type="checkbox"/> Epson RX/FX printer | <input type="checkbox"/> Epson w/Graftrax 80 |
| <input type="checkbox"/> MX80-111 / MX100-111 / Any w/Graftrax Plus | |
| <input type="checkbox"/> MX100 w/o Graftrax | <input type="checkbox"/> MX80 w/o Graftrax |
| <input type="checkbox"/> Gemini 10(X) or 15(X) | |
| <input type="checkbox"/> IDS Prism / Microprism | <input type="checkbox"/> Okidata 82A / 83A |
| <input type="checkbox"/> Okidata 92 / 93 or 84 | |
| <input type="checkbox"/> Brother HR-1 or Comrex CR-1 | |
| <input type="checkbox"/> C. Itoh Prowriter I or II | |
| <input type="checkbox"/> NEC PC-8023A | <input type="checkbox"/> Other DMP-85 printer |

In the following diskette formats:


- | | |
|-------------------------------------|---|
| <input type="checkbox"/> Kaypro II | <input type="checkbox"/> Osborne |
| <input type="checkbox"/> Apple CP/M | <input type="checkbox"/> Otrona Attache |

- | | |
|--|----------------|
| <input type="checkbox"/> Printerizer: | \$35.00 |
| <input type="checkbox"/> with HexPrintR: | \$55.00 |
| <input type="checkbox"/> HexPrintR only: | \$39.00 |

ORDERING INFORMATION:

Prices include U.S. or Canadian First Class mail delivery. California residents add 6% sales tax. Overseas orders pay in US funds adding \$4 shipping. Payment may be by money order, check, Visa or Mastercard. UPS COD add \$4, 2nd day UPS COD add \$6. Please include phone number with order. Both Printerizers and HexPrintR work with versions 2.26, 3.0 and 3.3 of WordStar under CP/M and CP/M Plus.

Trademarks: HexPrintR and Printerizer, C I Software; Prowriter, C. Itoh Electronics; WordStar, MicroPro Corporation; Graphtrax, Epson America.

 **C.I. SOFTWARE & COMPUTER PRODUCTS**
 1380 Garnet Ave. E149, San Diego, CA 92109 619/483-6384

Special Osborne® Software

Accounting Partner, Star Systems. A total accounting package. Written in CB80. Very fast. Comes with GL, AR, AP, Payroll, Invoicing, Purchase Orders, and has built in item file to keep track of inventory. This is the program that IBM, Xerox, Kaypro, Epson, and other have chosen to sell at their product centers and sales outlets. Bargain at list of \$395. Central: \$295.

Fancy Font, Softcraft. If you have an Epson MX-80 with Graftex, or any Epson RX, FX model with the built in Graftex feature, or Gemini 10X printer, then *Fancy Font* can turn your words to near typeset letter quality. You can even teach *Fancy Font* to make characters. Print any language you want. Unique mathematical symbols or Greek characters are a cinch with this program. It's magical. List: \$180. Central: \$149.

Home Accountant Plus, Continental Software. Tracks 5 checkbooks. Maintains 100 budget categories. Prints checks, personal balance statement, and more. Allows 1,000 transactions per month. Perfect package for home accounting on the Osborne. Provides Hi-Res graphics: bar graph, line graph, and trend analysis. Aids in fast bank reconciliation. Allows multiple file extension on multiple diskettes. List: \$99. Central: \$79.95.

SuperFile, FYI. Database manager for textual material. This program handles any kind of text input and requires no special format for input. Easy to use. *SuperFile* keeps track of 255 disks and allows up to 20,000 records per database or filing system. Indexes up to 3,000 key words per database and 250 separate key words per record. Each record may have as many as 512,000 characters. Quick, logical sort and search requests finds your information fast. Program supports up to 16 logical drives. List: \$195. Central: \$157.

T/Maker III, The T/Maker Company. InfoWorld rated this package excellent in every category. An integrated package, all one disk. Word processing, calc, line graphs, list management, sort, and more. A very tight program. Powerful built in features worth much more. If you're tired of switching disks to get a simple task done, you're ready for *T/Maker III*. List: \$275. Central: \$199.

The Word Plus, Oasis Systems. The electronic spelling dictionary of the future. Finds misspelled words and corrects them at the touch of a key. Includes a unique word count feature you'll love to use. Ever wonder how many times you use a particular word in your writing? *The Word Plus* can tell you. You can even add words to this dictionary. *The Word Plus* also locates rhyming words, solves crossword puzzles, word jumbles, and anagrams! This multi-faceted dictionary is a must for anyone who writes. List: \$150. Central: \$99.

Osborne is a trademark of the Osborne Corporation

Enemies of Osborne... Spikes, Surges, and Noise!

The Osborne has enemies. But now you can protect it from the mish mash of electrical currents that race through your home or business. Powerful up-surges of current can actually blow out your machine. Less powerful, barely noticeable spikes, surges, and noise can silently degrade your system in time, ruining chips, destroying data, and causing expensive service calls.

The plain truth is: "Line filtering will protect your computer...from power surges or other undesirable occurrences from the power source." Surge protection will help your Osborne provide years of trouble-free service. Also, if you plan to use your Osborne to access information by modem, you must have a reliable high frequency noise (EMI/RFI) suppressor to insure against data loss and scrambling.

There are many "toy" surge suppressors on the market. They are smartly colored, but beware. The performance difference is amazing. The best surge and noise suppressors on the market are made by Panamax. Our "Panamax Challenge Certificate" tells all. It is a startling comparison of Panamax quality with 11 other well-known brands. One aspect of this revealing report tells how Panamax responds to and cuts surges in 5 or less pico seconds, while most other suppressors respond at a comparably slow 5 to 50 nanoseconds!

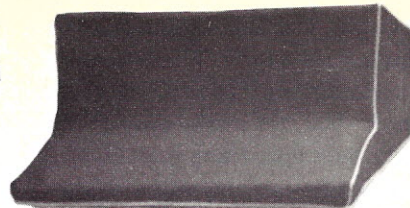
Check our regular low prices. Try the Panamax of your choice for 15 days. Receive the "Panamax Challenge Certificate" with your purchase. If not completely satisfied with your purchase, return for immediate full refund. Your Osborne deserves Panamax protection, the best there is. Order today.

Introducing A Classic Form Fitting Osborne® Cover

At last, the classic Osborne dust cover you'll be proud to own and use. This first rate computer cover is made from a premium, lint free, static free, washable, free breathing, and fade resistant sailcloth. It comes in a rich looking Navy blue or Sand. The Navy cover has a smart contrasting silver gray piping and trim that adds a superior finished look. Not to be outdone, the Sand cover is handsomely finished in a rich chocolate piping and trim. Fits machine that is set up and ready to use.

This remarkable form-fitting dust cover makes you feel good and will keep your Osborne dust free and looking brand new for years to come. For a limited time only, your price for this factory direct, custom made, sailcloth Quality Cover is \$16.95. When ordering remember to indicate color preference. This special low price is subject to change. You must be completely satisfied with your purchase of this cover or we will refund your money immediately. Order today.

Richly tailored inside and out. Look inside any of our Quality Covers; see the ultimate finishing: we use machines that sew with 3 needles so that edges will not unravel or shed lint. We stress perfection because you deserve the best. Compare for long-lasting satisfaction.



Matching sailcloth printer covers are \$14.95 each. Complete list sent with order.

New. Special two-piece Osborne sailcloth cover. Set covers CPU and keyboard. \$19.95 per set.

- Quality tailoring
- Easy care fabrics
- Attractive colors
- Professional appeal

FACTORY DIRECT

Kleertex®



- \$18.95 for one
- \$35.00 for two
- \$49.95 for three
- Why pay more?

Learn Software Commands Super, Super Fast!

Now Available:
Wordstar/MailMerge
dBase II

Time-saving Kleertex templates are made from a durable, non-glare plastic, and can be put on and lifted off the keyboard instantly. The software commands on Kleertex templates are easy to read and are conveniently arranged in alphabetical order. With a Kleertex template on

your keyboard, software commands are only a glance away, at your fingertips. This makes it easy to learn programs that come with your Osborne. Stop going back to the book to get a two or three keystroke software command or format. Now you can learn software commands super fast, so you can make better use of your powerful programs. The expertly organized Wordstar/Mailmerge template, for example, gets you into word processing in half the time. A special dBase II template cuts through the learning curve like a knife and gets you programming sooner. Kleertex templates for SuperCalc and Personal Pearl get you moving fast on these programs too. Once you try Kleertex templates, you'll wonder how you ever got along without these useful tools. Central's special price for one template is \$18.95. Choose any two templates for \$35 and save. If you like, you may combine purchase of any of these four templates for super savings. Complete satisfaction is guaranteed or money-back. Makes learning software a breeze. Great value. Order today.

"Spikes and surges can be the greatest threat to your computer outside a 4 year old child with a jelly sandwich aimed for the disk drive slot."

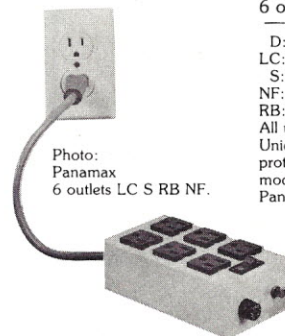


Photo:
Panamax
6 outlets LC S RB NF.

PANAMAX SURGE SUPPRESSORS

Description	List	Price
2 outlets D	\$89.00	\$59.95
2 outlets, D NF	\$109.00	69.95
4 outlets, LC S	\$107.00	\$79.95
4 outlets, LC S NF	\$127.00	\$99.95
6 outlets, LC S RB	\$124.00	\$99.95
6 outlets, LC S RB NF	\$144.00	\$109.95

D: Connects direct to grounded wall jack.
LC: Includes 6 foot long heavy duty line cord.
S: Includes illuminated on/off switch.
NF: Includes EMI/RFI noise filter.
RB: Includes reset button.
All units include the added security of a 4 amp fuse.
Unique Panamax EMI/RFI noise filters provide protection in common and transverse mode. Essential for modem communications, multi-user stations, etc.
Panamax units are factory guaranteed for 24 months.

"Power line-associated problems are estimated to cause nearly 70 to 90 percent of the malfunctions in the IBM PC."

"Overvoltage can be fatal to both data and hardware alike."
P.C. Magazine, March 1983

Lockable Diskette Defender

Handsome, sturdy, smoke-tinted acrylic tray holds 70 Osborne-size diskettes. Flip-up lid keeps out dust, debris, and moisture, and locks securely to guard your important work. Comes with 7 dividers with index tabs for easy filing and to keep floppies upright to prevent bending, warping, and scratching. Tough and secure metal lock never comes in contact with diskettes because it is enclosed in a special plastic housing. Super value at \$22.95 each. Keep prying eyes and sticky fingers away from your data. Guaranteed. Order today.

Lifetime Guarantee

3M Single-Sided and Double Sided Double Density soft-sectored diskettes are certified error-free, and will work like a charm on your Osborne. This name brand diskette is a proven performer. We guarantee trouble-free, lifetime performance of 3M disks or money-back. Strong reinforced hub ring furthers the long service life of these diskettes. There is no better diskette made for your Osborne.

3M SSDD diskettes for Osbornes: **\$22.30**
3M DSDD diskettes for Osbornes: **\$31.00**
3M Head Cleaning Kits: **\$22.95**
3M DeskTop Anti-Static Mats: **\$49.95**

A Computer User's Secret Weapon

Tens of thousands of computer users have discovered a secret weapon that attacks and eliminates boring, repetitious routines and, at the same time, speeds up and improves accuracy in computing. Now, Osborne users can use this secret weapon too.

SmartKey II, the software program that Peter McWilliams and others rave about in their popular computer books, lets you redefine your keys at any time, even while other software—such as Wordstar, SuperCalc, Personal Pearl, etc., is in operation.

Imagine writing your friend Rumpelstiltskin a letter. Since you don't want to upset the little guy by misspelling his name, choose any key on your Osborne to be temporarily redefined to spell out "Rumpelstiltskin" every time you touch it. Spell it right one time and it pops into your letter each time you press your "Rumpelstiltskin" key. SmartKey II makes this and thousands of other smart moves possible.

SmartKey II's amazing features include: allowing you to assign up to 3,750 characters to a single key; letting you define over 300 special function "smart keys;" and providing an exclusive supershift feature that lets every key have up to four meanings. When you use SmartKey II, you'll find once you've redefined your mundane keys into "smart keys," you can save your definitions in a special file, put them to work anytime you want, and make new definitions or change them at will. Imagine saving complex command codes, boilerplate paragraphs, sentences, nouns, inventory numbers, or whatever, and then recalling each of them with the stroke of a single unique key. That's right, call up your specially designed "smart keys" whenever and wherever you want, and inject them into your work. This "secret weapon" is a must-have software program for all Osborne users including writers, lawyers, doctors, accountants, researchers, secretaries, programmers, and businessmen.

No matter what you do with your Osborne, SmartKey II is a time-saving "secret weapon" you can't afford to be without. Anyone can break into fast computing today by reducing often used multiple keystrokes to single keys. SmartKey II can make you and your Osborne more productive than ever.

A super companion to SmartKey II is SmartPrint II. Now with single-stroke commands, SmartPrint II can make your dot matrix printer do dozens of tricks. Italics, greek characters, graphic symbols, boldface, underlining, extended typefaces, accent marks, and so much more, are all easy to do with SmartPrint II. Great for some letter quality daisy wheel printers too. SmartKey II and SmartPrint II are regularly \$129. Smartkey II alone is usually \$89. Now, for a limited time only Central will send you special combination SmartKey II and SmartPrint II pack for \$79. To get this super package fast, order today. Don't delay. If you use your Osborne frequently, SmartKey II can save you many thousands of tedious keystrokes. Imagine the time and money you'll save by using this excellent program. Please order today. This offer may not be repeated.

Price Protection

We have a super price protection policy: Central will match or beat any price you see listed in this publication on products also advertised in our ads. That's a promise. Try our friendly service today for affordable, price-protected, lightning-fast deliveries. Please ask for our free catalog. Thank you.

Do You Wish Writing Was Easier?

If you need to write, or want to write clearly, your Osborne and the software program *Punctuation and Style* can help you get there faster. It improves, clarifies, and enriches your writing by identifying sentences with misused, redundant, faulty, cliched, or erroneous phrases, and shows you how to improve them. It helps you rewrite and check your work by quickly marking and annotating your files for easy correction. In addition to computer-fast identification of awkward, muddy, pompous, and wordy sentence structure, it also finds missing or improper punctuation, unbalanced quotes, wrong abbreviations, faulty capitalizations, and much more. *Punctuation and Style* actually improves your writing by mercilessly pointing out grammatical errors. After a few weeks with Oasis System's *Punctuation and Style* your writing is bound to become more dynamic, expressive, and honest. In time, you'll stop worrying about grammar and work on projecting ideas instead. After all, that's what writing is about.

Punctuation and Style makes writing and rewriting much easier. The list price of *Punctuation and Style* is \$125. Central's price is \$99. Experience the power of this valuable "Punctuation Checking and Writing Improvement Software" yourself. Order today to get this program fast.

Punctuation and Style works on files created with Wordstar and other word processors. It comes with an easy to use, clearly written manual and is packaged in an attractive binder. Join thousands who now write with more confidence, faster, and better.

Superior Screen Magnifier

There are two ways to get a larger screen for your Osborne. Buy a bulky external monitor and a monitor adapter, or buy an Easy View screen. If you want portability, there is only one way: The Easy View screen. Here's what the Stockton Osborne group said when they compared Easy View to three other computer screen magnifiers: "We preferred Easy View for its durability, portability, strong magnification, and Bausch & Lomb optics." There is no better Osborne screen magnifier made. Easy View enlarges the screen by a full 50% or more and delivers sharp, crisp characters. This precision and clarity is hard to show in a small photograph, but is made possible because the Easy View magnifier is a super smooth, polished lens made by a world leader optical lens manufacturer. Easy View is light weight, scratch resistant, and fully portable. It comes with a sturdy, attractive bracket that mounts the Easy View screen on your Osborne instantly. The Easy View is adjustable, so you can move and set it at the exact degree of magnification you desire. Considering its super practical application and its superior design, Easy View is a rare value at its current low price of \$39.95. Try it for 15 days. If not completely satisfied with your purchase, return it for an immediate full refund. Order today.

Warning: Easy View makes similar products look poor. Easy View makes your screen image larger without distortion.

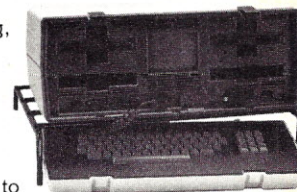
Cordura Travel Case

A full featured, padded carrying case at a price that is down to earth. The Coverman Osborne carrying case is made from a strong, super-material called "cordura." This material is rip, shred, and water resistant. The Coverman case comes fully padded and lined, so your Osborne is protected from unexpected bumps and jolts. Since your Osborne is completely enclosed in this case, it keeps rain, sand, and other debris out of your machine. The Coverman case comes with external carrying handles, and a detachable, heavily padded shoulder strap, that comes in handy when you have to carry your Osborne over a long distance. There is also a large interior pocket, perfect for transporting manuals and diskettes. The Coverman Osborne carrying case is regularly \$79.95. Central is proud to offer this expertly constructed case at \$49.95. Please indicate your choice of color: silver-gray, dark blue, or brown. All straps and carrying handles are black. You must be completely satisfied with your purchase of this handsome travel case or we will refund your money immediately. Order today.



Perfect Osborne® Stand

Simple, strong, sturdy, safe. These words describe an attractive, angled stand that provides a perfect spot to place your Osborne.



This stand is made from rounded, steel rods covered with a thick, shiny, soft, black polymer material that protects your Osborne and table top from scratches. Unlike flat wood or acrylic panels used in other stands, the tough supporting rods of the Smart Stand (TM) do not obstruct air flow. In fact, since your Osborne is lifted off the table top and gently angled by this stand, air flows freely all around your computer to help keep it cool. When you're finished computing, you can slide your keyboard completely under the stand to create a working area on your desk. The Smart Stand is a super value at \$34.95. Try it for 15 days. If you are not completely satisfied with your purchase, send it back for a full refund. Matching 80 or 130 column printer stands are only \$24.95. Order today to get the Smart Stand fast.

CENTRAL COMPUTER PRODUCTS

860 Central Avenue, Dept. M2
Fillmore, California 93015
(805) 524-4189

Dear Central,

Please send me the items listed below. I want fast, friendly service. Also, send me announcements of Osborne product specials. My check, money order, or card number is enclosed. Thanks.

Description	Price
Osborne Model _____	Sub Total _____
CA Resident 6% Tax	_____
Postage & Handling	\$ 3.00
FIRM MONEY BACK GUARANTEE ORDER WITH CONFIDENCE	Total \$ _____
<input type="checkbox"/> Navy blue	<input type="checkbox"/> Sand
<input type="checkbox"/> Send free catalog	<input type="checkbox"/> Money Order enclosed
<input type="checkbox"/> Check enclosed	
<input type="checkbox"/> Visa/Mastercard # _____	
Exp. Date _____	Sig. _____
Name _____	
Address _____	
City _____	State _____ Zip _____

Phone Orders Accepted.
To order by mail use coupon, letter, or photo copy. Thank you.

Review of The Desktop Accountant

The Desktop Accountant is a four-module integrated system.

The Desktop Accountant, currently being distributed by Rocky Mountain Software Systems, is a four module integrated accounting package that sells for \$395 (available for both the Osborne 01 and Executive). The program runs on a wide variety of CP/M and IBM PC-compatible computers.

You can buy the modules (General Ledger, Accounts Payable, Account Receivable, and Payroll) separately at \$195 each. An Inventory Management system that works with Desktop Accountant is also offered for \$295. You can buy manuals for each module for \$25 apiece. Audio Training Cassettes are also available for \$25.00.

To run the package on an Osborne 01 or Executive, you need a wide printer (132 characters per line). You use MicroSoft BASIC to run the package.

This review was prepared using an Osborne 01 with single-sided, single density drives. Since my disk capacity is limited, the package uses 14 diskettes, not counting the data diskettes for each module. Because of the automatic disk back-up feature of the package and the organization of data files, I need 8 data diskettes for each month. It is recommended that you use a separate data diskette for each module (each one of these needs a backup diskette). For one year's worth of data, my system would use 52 diskettes.

There are two areas in which this software excels: user support and documentation. Yes, the program works. It has all the features necessary to keep adequate records of all business transactions made by your company. It prints a variety of useful reports, including checks. The forms needed for printing the reports are available from a few different sources and Rocky Mountain Software Systems recommends some of them. But the support policy and documentation are what really stand out about this package.

Support

The cost of the system includes a one-year subscription to *TCS Debits and Credits*. This quarterly newsletter provides bug fixes and enhancements for users. Rocky Mountain Software Systems (RMSS), started in 1975, made the decision early on to update their software only once a year (if needed). Unless a

particular bug would really destroy the system's usefulness, they decided to print the fixes in a newsletter, rather than have users send their software in for an update.

The instructions for doing the fixes are complete and uncomplicated in most cases. At the end of each year, you can send your copy to RMSS to be updated for a reasonable fee.

As users come up with enhancements that make the system more attractive in one way or another, the enhancements are printed in the newsletter, although RMSS does not provide support to a system that has been altered.

RMSS has a unique support policy: a 30-day defective media replacement, a 90-day telephone support period and a one-year mail support period. After the 30-day media period has expired, replacement disks are available for \$15.00 each plus \$5.00 shipping and handling.

The telephone support period allows as many calls as necessary to get the system running properly. The only restriction here is that the user pays for the phone calls. After the 90-day phone period is up, the user is not totally abandoned to his own means, however. A telephone support contract is available for \$50 per month to software owners. Or, if you prefer, an hourly charge of \$45 is available and can be applied to a VISA

by Cheryl Peterson

This article first appeared in *Computer Shopper*.

© 1984 Cheryl Peterson
The Desktop Accountant is a trademark of Rocky Mountain Software Systems.

or MASTERCARD. There is a one hour minimum for the \$45 rate.

In addition, there are local consultants in California, Florida, New York, Ohio, Virginia, Indiana, Montana, and Canada. These consultants are already familiar with the software and charge about the same rate as RMSS. They are listed in *TCS Debits and Credits*.

To make modification by the customer easier, RMSS provides an indexed version of the MBASIC code for about a hundred dollars. The system is not copy protected, so you could list the source code to your printer without buying the indexed version; however, the ribbons and paper used would equal more than the cost of buying the listing from RMSS and you wouldn't get the indexing that makes it easy to find necessary variables.

As all this implies, the programs are not perfect. Realistically though, no program is perfect for every application. Having the code available makes it possible to tailor the program to individual business needs. It also, in this case, allows for repairing problems (bugs) without waiting for diskettes in the mail.

Documentation

If documentation as good as Desktop Accountant's accompanied every other program I've seen, I could never complain. The documentation assumes that the user knows nothing about computers, but a good deal about accounting — at least enough accounting to have the business running under a regular book-keeping system.

A special section called "Read Me First" gives detailed instructions on how to create your working and data disks. The section also has a suggested routine for using the programs; what things to do daily, how to create your data files, the importance of back-up disks, etc.

Each modules' instructions start out the same way: by explaining some fundamental computer terms, how the computer works, and how to handle diskettes or disks. Once you've read this section, you can ignore it in the other modules. Even old time computer users wouldn't be hurt by treating this as a short refresher course.

The instructions for starting up were simple and direct, step-by-step. A short overview of each module explains what the programs in that module are meant to accomplish. The operator's guide explains how to use the activities programs.

This section is absolutely marvelous. Since the program is completely menu driven, explaining every option could get hairy. However, the operator's guide section does an excellent job. A video display diagram shows the main menu with the program to be explained boxed in. A short description follows, then a step-by-step set of instructions leads you through the program's capabilities. The pages are laid out in wide columns labeled *STEP*, *VIDEO*, *PROMPT/DISPLAY* and *YOUR RESPONSE*.

All instructions are in plain English without too much "computerese." There are special sections that give even more detailed help in creating necessary files. Each module has a section on transferring information to the General Ledger.

The appendices make it easy to find some very helpful information: error messages and explanations, sample data files and reports, data file structure and layouts, disk file names and utility programs. The sample data files allow a new user to get right into the programs and start trying to make mistakes — before they get their own files up and running! This is great for becoming familiar with the system.

The sample reports really come in handy to see what you're going to get if you use a particular report option. The General Ledger generates 13 reports and documents, the Accounts Receivable 8, the Accounts Payable 11 (including checks), the Payroll 10 (including checks).

After seeing a salesman crash his system on a Kaypro by putting in the wrong disk, I appreciate that the RMSS package checks to be sure you've put in the correct disk. When it discovers a discrepancy, it asks you to insert the proper disk. Changing disks requires typing RESET followed by Return. This sets the drive back to normal read/write (from read only). I've seen documentation that would just assume you knew that; this

documentation doesn't make such assumptions.

An Experienced View

To get a better viewpoint of the system, I contacted an acquaintance who has been using the package for about a year. He uses it everyday to keep track of the accounting for his business. He said that the package was well thought out, very comprehensive, complete, with lots of options. He especially appreciated the good error-trapping features. When asked about bugs, he admitted to a few. However, he said they were fixable using the information found in the newsletter. He had found and written fixes himself. Most of the fixes seem to have been located.

He emphasized that in his dealings with RMSS he was happy. "Fabulous. They have the best support possible."

I asked him if he would have any reservations about recommending the product to other users. He replied, "The usual. The package won't do everything for you. You have to know accounting and you have to know how to use your computer. It's not for the novice. The program is a little bit inflexible in some of the reports, but it prints out everything you really need. You have to know accounting to use it, though."

Here is a module-by-module outline of the package.

Payroll

The payroll module keeps a data file for employee information: employee number, name, address, social security number, number of deductions, type of pay, pay period, and month, quarter and year to date totals for pay and deductions. Another data file keeps track of the tax and other deductions tables. A third file holds the information to be transferred to the General Ledger.

The programs in this module will calculate the deductions, print the checks, print out the tax tables, check register, 941 worksheet, employee list and monthly or quarterly payroll summaries. In the paychecks program, the checks can be postdated with the date of your

The support policy and documentation are what really stand out about this package.

choice. If the general ledger package has not been purchased you can still transfer the information manually because the payroll module will print out a general ledger transfer report. At the end of the year, you can print your W-2 forms, as well.

Accounts Payable

This module will maintain a record for each vendor, help decide when to pay due vouchers (either by due date or discount date), and print the necessary checks and check register. The data file keeps the ID number, name, address, phone, YTD purchases and payments, current balance, last check paid to vendor, the check's date and amount, bill due date and whether it is a monthly entry, the amount and account number, the discount date and amount, and the last month paid.

The module will print a transaction register, open voucher report, cash requirements report, aged report, and the vendor file list. Each of these is chosen from the main menu. In the vendor file maintenance program, the options include change, add, delete or query. The vouchers to be paid can be chosen individually and the checks generated as you go along. Or you can scan and mark the vouchers for payment and then print all the checks at once.

Once again, the end of period totals can be transferred to the general ledger through a file or manually by printing out the transactions list.

Accounts Receivable

The accounts receivable uses a data file similar to the one used with accounts payable, except that the information is on customers instead of vendors. The module shows the balance due for each customer and how much of the balance has been brought forward from the previous month. It has year-to-date totals

and the dates of last debit and credit. The tax rate is assigned when the customer file is created, but can be changed at will.

The programs in this module will print invoices, statements, ageing reports, transactions reports and customer account reports. Sales tax is automatically included when calculating invoice amounts. Credits can be applied toward a specific invoice or just toward the most outstanding amount. If the customer has a balance forward account, a statement can be generated to show all debits and credits for the current period, but all moneys owed from previous bills will be added into a lump sum. Accounts can be designated regular, balance forward or automatic invoice. The regular account does not lose the details of unpaid invoices. The automatic option is used for billing a customer who is making regular monthly payments.

Again, this information can be transferred directly to your general ledger program or manually added after printing out the periodic transaction file.

General Ledger

The general ledger program uses a master file and a transactions file for all your accounts. These two files keep track of business dealings during the current accounting period. The master file contains three kinds of information. The Chart of Accounts has the account numbers, descriptions, and balances (YTD, current, and budget). The report formatting codes, which properly space and separate the information on the financial statements, consists of the type code, master/sub code and column code. The historical codes that show the balances for one year previous are also kept in the master file.

The programs in this module keep a running tab of income and expenses. This information can be generated as an income statement, departmental income statement or balance sheet, with com-

parative totals for the past year. You can also print a trial balance sheet. You can query any account to show its transactions. This information can be sent to the screen or to a printer, or all transactions can be printed. A record of all cash disbursements can also be generated.

If all of the other modules in this package are available, you can transfer data to the general ledger from the payroll, accounts payable and accounts receivable modules. If not the information can be entered manually.

Conclusion

Although this package has had some bugs and more may still be found, I feel that the product warrants considerable praise. This accounting system does just about everything the small- to medium-sized business owner needs, and at a reasonable price. When a business outgrows this software, it can be upgraded to a more comprehensive system.

The company (Rocky Mountain Software Systems) realizes the importance of good customer support and does not abandon the user to his own devices at the first sign of difficulty. It is competitively priced with other similar systems, and doesn't contain a multitude of useless features that merely increase the price of the software. The documentation is well-organized and specific, and its appendices and index are useful. The sample reports demonstrate the availability and format for output of information.

Look this package over carefully before choosing your accounting system.

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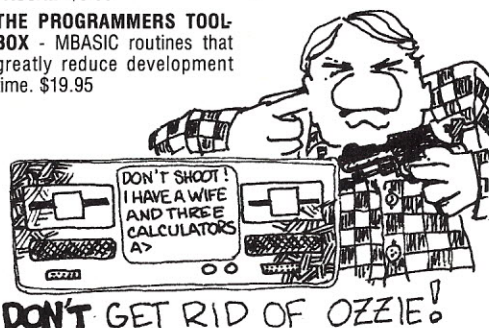
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SuperCalc Upgraded At Last!

Cheryl Peterson

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Many Osborne users' dreams have finally come true. MicroPro and Sorcim have made available reasonably-priced upgrades to WordStar and SuperCalc. Sorcim was a bit quicker about it than MicroPro, so I have a few words to say about the SuperCalc 2 upgrade. Since I've ordered WordStar 3.3, I should be able to point out its new features and improvements in the next installment of this column. To be totally honest, I switched to NewWord six months ago and wonder if MicroPro can win me back (*see article on NewWord in this issue*).

SuperCalc documentation! At last! For Osborne 1 users, one of the most disheartening aspects of the free software that comes with the machine is the lack of documentation. No matter how powerful a software package is, if you can't figure out how to use it, it's useless. In the case of SuperCalc's documentation supplied with the Osborne 1, useless was the word.

It's really amazing what a good editor can do. The new documentation starts out exactly the same as the old. The initial lessons on how to use SuperCalc are almost verbatim copies of those in the Osborne 1 user's manual, with one slight variation. The instructions have been changed from second person to first person; instead of "you" doing the lessons, "we" do them. The layout of the pages in the manual makes it much easier to

find the lesson on a particular feature.

A few extra lessons to demonstrate what the new features of the program can do also help. One of these is user-defined formats. You can tell SuperCalc that for all cells in a specified area you want the displayed information to be in a particular form.

You can assign a floating \$, embedded commas, minus sign in parenthesis for negative numbers, and/or a zero for blank entries. If you wish, you can have the data appear in percentage form. You can also specify the number of decimal places or a scaling factor. The scaling factor is particularly useful, if you wish to have your data displayed in graph form.

Normally SuperCalc translates a text value into zero, so that alphabetic characters do not interfere with calculations. However, this prevents text values from being transferred from one cell to another. By using text constants instead of regular text, you can now transfer text from one cell to another. Text constants are defined by surrounding them with parenthesis.

Another advanced feature allows using textual constants in a lookup table. A suggested use for this would be translating a number value for the day of the week into the word for that day; 1 = Sunday, 2 = Monday, etc. This could also be done for the names of the months, if you wanted dates to appear as day, month, year (7 May 1983).

You can rearrange your spreadsheet by column or row, hide information in specified cells or print the spreadsheet with or without borders.

One of the best "features" of the upgrade is still the documentation, though. The handy reference section (half the manual) makes it easy to find the information you need, while you're actually using the program. Divided into categories, it becomes a breeze to look up a forgotten command option.

Also helpful is the separate section that lists in alphabetical order all of the slash commands and their options. SuperCalc has always had a feature called the "Answer key," which provides help menus at any level when you press a question mark (?). You can quickly get back into your worksheet by pressing any key; however, I hate to see "help information" replace my spreadsheet. One way around this is a card with all the commands and their options listed on it. Sorcim provides one with the upgrade.

Another section explains all the functions SuperCalc allows you to use on your data. These include arithmetic, logical, calendar and special functions. They are listed alphabetically by type, making it easy to find the correct representation for each one.

Error messages aren't a mystery because they too have their own section. There's also a glossary to look up any terms with which you are unfamiliar.

A new feature in the upgrade, called Super Data Interchange (SDI), allows you to share information with database, word processing, or other spreadsheet programs. This is done by creating new files that are in the proper format to be read by the other programs. Information that is later added to those files can be transferred back to a SuperCalc 2 file.

The instructions for this section are both tutorial and referential. After the tutorial explains how to use the SDI program, a reference section details the data format for files created using SDI.

At an initial offering of \$50 to registered SuperCalc owners, this was a good value. After the early opportunity however, the price was raised to \$125. For those who already use the SuperCalc program, it is undoubtedly worth it. SuperCalc 2 can use data files created by the original SuperCalc, so you get more flexibility without having to reenter all data. But those who got the Osborne for other purposes shouldn't spend that much for an upgrade on a program they never use. Unless you have a serious ap-

plication for it, the upgrade isn't worth \$125.

The SuperCalc 2 upgrade is also available for all IBM PC and compatibles machines, Apple and compatibles and CP/M computers. It is \$125 for all versions. The SuperCalc 3 upgrade is available for the IBM for \$250. A Sorcim representative indicated that a SuperCalc 3 upgrade for those with SuperCalc 2 should be available in 1984. It should be priced at \$125 also.

Next time I'll be talking about some data base management programs that can help you get organized.

Let me know what you'd like to see in this column. The editors and I want it to be useful to you. For example, I'd like to do a column on frequently asked questions of the beginning business user, for instance, but if no one asks questions, how can I answer? Write to me at PO BOX 398082, Miami Beach FL 33139.

Cheryl Peterson contributes regularly to several computer magazines including Portable Companion.

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John Gaudio is an electrical engineer holding two U.S. Patents on computer systems. He's been a consultant to OGC and has written several articles for their magazine, The Portable Companion. He continues to write regularly for the newsletters of the First Osborne Group and the Denver Osborne Group, and has spent the last two years helping people to get more from their Osborne Computers.

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Print By Numbers

An easy MBASIC program for using an Epson printer

Pat Watters and Steve Cutter

There are already several public domain programs that help you configure the Osborne I with the Epson MX80 printer, but the MBASIC program we present here has all the features that you are ever likely to need. It makes it possible, for instance, to print double width, double strike, and compressed all at once, and set the paper width and the line spacing at the same time. See if you don't agree that it is worth the time and trouble (and 6K) to have all these possibilities, and more, at your finger tips.

To run the program, the printer must be turned *on*. (figure 1). Otherwise the computer just sits there, and pressing Control-C or Reset or Control-anything else has no effect (is there any more helpless feeling?).

The program presents you with a menu of print modes (figure 2). Within certain limits you can choose all of the print modes at once. The limits are with subscripts and superscripts. These modes do not work with double width or with emphasized print, so if you choose either double width or emphasized print you will not get subscripts or superscripts.

Also, if you choose a script and then change your mind and turn it off, unidirectional printing is also turned off but double strike is still on. The menu will show you this situation so that you

```
*****
*****
                                T U R N   O N   P R I N T E R
*****
*****
*****
*****
PRESS RETURN WHEN READY?
```

Figure 1. The program first reminds you to turn on your printer.

```
PRINT MODE MENU

[ ] [OFF] 1 COMPRESSED
[ ] [OFF] 2 DOUBLE WIDTH
[ ] [OFF] 3 DOUBLE STRIKE
[ ] [OFF] 4 EMPHASIZED
[ ] [OFF] 5 SUPERSCRIPT
[ ] [OFF] 6 SUBSCRIPT
[ ] [OFF] 7 UNDERLINE
[ ] [OFF] 8 ITALICS
[ ] [OFF] 9 UNIDIRECTIONAL

10 GO TO FORMAT MENU

11 TO EXIT
```

Scripts do not work with DOUBLE WIDTH or EMPHASIZED.
Turning off scripts also turns off UNIDIRECTIONAL
printing and leaves printer in DOUBLE STRIKE.

ENTER OPTION NUMBERS AND PRESS RETURN AFTER EACH ONE

Figure 2. The program presents you with a menu of print modes. Within certain limits you can choose all of the print modes at once.

PAGE FORMAT MENU

		Standard Values		
[	]	[ 0]	1	SKIP PERFORATION
[	]	[ 80]	2	SET PAPER WIDTH
[	]	[ 11]	3	SET PAPER LENGTH IN INCHES
OR				
[	]	[ 66]	4	SET PAPER LENGTH IN LINES
[	]	[ 36]	5	SET LINE SPACING
[	]	[ ]	6	8TH BIT OFF OR ON
7 GO TO PRINT MODE MENU				
8 TO EXIT				

ENTER OPTION NUMBERS AND PRESS RETURN AFTER EACH ONE

Figure 3. The page format menu lets you choose, in the same way as print codes, the paper width, paper length, or line spacing.

can turn double strike off and unidirectional printing on.

One of the options of the print mode menu sends you to the page format menu (figure 3). There you can choose, in the same way as print codes, the paper width, paper length, or line spacing. You can choose to set paper length in inches or in number of lines. After exiting the program, sending a form feed will cause the printer to move only the number of lines or inches you specified.

Another choice is "skip perforation" which is useful, for instance, with LLIST in listing a program, or with LIST and Control-P in dBASE II, to skip over a few spaces without printing on the perforation. Six or eight spaces is about right for most uses. Setting the 8th bit off allows printing of WordStar files with TYPE without all the WordStar italics.

The page format menu refers to "Standard values." These are default values that once changed, the program will not default to them; you must reset them if you want to change back within the program.

Whatever modes and formats you choose will send the proper codes to the printer, and after you leave the program these codes remain in the printer's memory until you run the program again, send the 'clear' codes manually, or turn the power to the printer off.

You can switch back and forth from one menu to the other until you have made all your choices. Then leave from

either menu by pressing the appropriate "exit" number. Now the program will print out the choices you have made in the print styles you have chosen.

The program then asks if you want to exit to CP/M. If your answer is Y(es), the printer will do a form feed (if you specified a length it will be the length you chose, otherwise to the top of the next page) and you will see the CP/M A) prompt on the screen. If N(o), you will exit to MBASIC.

PRINT.BAS is an easy program to read and follow — no messy "spaghetti code" here — and therefore an easy program to modify to suit your own situation. If you do not have an Epson printer, you can substitute your own printer codes at the appropriate line numbers.

A Walk Through

For the benefit of beginners, we provide a survey through the program line by line to help to clarify some points and make any necessary modifications easier.

Line 10

Give your program any name you wish. Don't call it PRINT.BAS if you have another program by that name.

Lines 20,30,40, etc.

An apostrophe simply enters a blank line to make the program more readable. It is ignored by the computer.

Line 50

This statement clears the screen. (Any time you want to clear the screen, you can use this statement in immediate mode, i.e., without a line number.)

Lines 60 to 80

These lines affect only the screen. If you do not have an 80 column screen you can eliminate these lines, and also eliminate TAB(14); at lines 110 through 150.

Line 180

This line clears all codes from the printer. LPRINT sends a line feed to the printer unless a semicolon terminates the line. At the end of every line with an LPRINT you will note a semicolon. (Where there is also a colon, it marks the end of the line.)

Lines 190 through 1420

This is the main body of the program. We suggest that you type it all in as is and SAVE it before making any changes. You will note that Lines 600 and 640 both say GOTO 620. That is because the same code (ESCape T) turns off both scripts (and unidirectional printing too). The numbers that you enter at Lines 1000, 1070, 1140, 1220 and 1300 must all be changed to strings using the STR\$ function. The rest of the manipulations are for appearance.

Lines 1430 through 1500

These lines print the options you have chosen in the styles you have chosen. You can delete these lines without affecting the rest of the program, but they give you a check before printing out an important document.

Line 1540

If you don't want a form feed, delete LPRINT CHR\$(12). Substitute


```

10 REM **** PRINT.BAS **** REV 2.2 *** 04/25/84
20 '
30 ' by STEVE CUTTER & PAT WATTERS
40 '
50 PRINT CHR$(26)
60 INPUT "52 or 80 column";COLUMN%
70 IF COLUMN%=52 THEN WIDTH 52
80 IF COLUMN%=80 THEN WIDTH 80
90 '
100 PRINT CHR$(26)
110 PRINT:PRINT TAB(14); " *****"
120 PRINT TAB(14); "*****"
130 PRINT:PRINT:PRINT TAB(14); " TURN ON PRINTER "
140 PRINT:PRINT:PRINT TAB(14); "*****"
150 PRINT TAB(14); " *****"
160 PRINT:PRINT:INPUT " PRESS RETURN WHEN READY";Y$
170 '
180 LPRINT CHR$(27);"@";
190 A1$=" ":A2$=" ":A3$=" ":A4$=" ":A5$=" ":A6$=" ":A7$=" ":A8$=" ":A9$="
200 B1$="OFF":B2$="OFF":B3$="OFF":B4$="OFF":B5$="OFF":B6$="OFF"
210 B7$="OFF":B8$="OFF":B9$="OFF"
220 PRINT CHR$(26)
230 PRINT TAB(18);"PRINT MODE MENU"
240 PRINT:PRINT
250 PRINT TAB(14);"["A1$"]";TAB(19);"["B1$"]";" 1 COMPRESSED"
260 PRINT TAB(14);"["A2$"]";TAB(19);"["B2$"]";" 2 DOUBLE WIDTH"
270 PRINT TAB(14);"["A3$"]";TAB(19);"["B3$"]";" 3 DOUBLE STRIKE"
280 PRINT TAB(14);"["A4$"]";TAB(19);"["B4$"]";" 4 EMPHASIZED"
290 PRINT TAB(14);"["A5$"]";TAB(19);"["B5$"]";" 5 SUPERSCRIPT"
300 PRINT TAB(14);"["A6$"]";TAB(19);"["B6$"]";" 6 SUBSCRIPT"
310 PRINT TAB(14);"["A7$"]";TAB(19);"["B7$"]";" 7 UNDERLINE"
320 PRINT TAB(14);"["A8$"]";TAB(19);"["B8$"]";" 8 ITALICS"
330 PRINT TAB(14);"["A9$"]";TAB(19);"["B9$"]";" 9 UNIDIRECTIONAL"
340 PRINT:PRINT TAB(25);"10 GO TO FORMAT MENU"
350 PRINT:PRINT TAB(25);"11 TO EXIT"
360 PRINT:PRINT "Scripts do not work with DOUBLE WIDTH or EMPHASIZED."
370 PRINT "Turning off scripts also turns off UNIDIRECTIONAL"
380 PRINT "printing and leaves printer in DOUBLE STRIKE."
390 PRINT:PRINT "ENTER OPTION NUMBERS AND PRESS RETURN AFTER EACH ONE"
400 INPUT SELECT%
410 ON SELECT% GOTO 440,480,520,560,600,640,670,710,750,800,1430
420 PRINT "Enter only 1 THROUGH 10": GOTO 390
430 '
440 IF A1$="ON" THEN 460
450 LPRINT CHR$(15);:A1$="ON":B1$=" ":GOTO 220
460 LPRINT CHR$(18);:A1$=" ":B1$="OFF":GOTO 220
470 '
480 IF A2$="ON" THEN 500
490 LPRINT CHR$(27) "W" CHR$(1);:A2$="ON":B2$=" ":GOTO 220
500 LPRINT CHR$(27) "W"CHR$(0);:A2$=" ":B2$="OFF":GOTO 220
510 '
520 IF A3$="ON" THEN 540
530 LPRINT CHR$(27) "G";:A3$="ON":B3$=" ":GOTO 220
540 LPRINT CHR$(27) "H";:A3$=" ":B3$="OFF":GOTO 220
550 '
560 IF A4$="ON" THEN 580
570 LPRINT CHR$(27) "E";:A4$="ON":B4$=" ":GOTO 220
580 LPRINT CHR$(27) "F";:A4$=" ":B4$="OFF":GOTO 220

```



```

590 '
600 IF A5$="ON" THEN 620
610 LPRINT CHR$(27) "S"CHR$(0);:A5$="ON":B5$=" " :GOTO 220
620 LPRINT CHR$(27) "T";:A5$=" " :B5$="OFF":A3$="ON":B3$=" " :A6$=" " :B6$="OFF"
   :A9$=" " :B9$="OFF":GOTO 220
630 '
640 IF A6$="ON" THEN 620
650 LPRINT CHR$(27) "S"CHR$(1);:A6$="ON":B6$=" " :GOTO 220
660 '
670 IF A7$="ON" THEN 690
680 LPRINT CHR$(27) "-" CHR$(1);:A7$="ON":B7$=" " :GOTO 220
690 LPRINT CHR$(27) "-" CHR$(0);:A7$=" " :B7$="OFF":GOTO 220
700 '
710 IF A8$="ON" THEN 730
720 LPRINT CHR$(27) "4";:A8$="ON":B8$=" " :GOTO 220
730 LPRINT CHR$(27) "5";:A8$=" " :B8$="OFF":GOTO 220
740 '
750 IF A9$="ON" THEN 770
760 LPRINT CHR$(27) "U"CHR$(1);:A9$="ON":B9$=" " :GOTO 220
770 LPRINT CHR$(27) "U"CHR$(0);:A9$=" " :B9$="OFF":GOTO 220
780 '
790 '
800 C1$=" 0":C2$="80":C3$="11":C4$="66":C5$="36":C6$=" "
810 D1$=" " :D2$=" " :D3$=" " :D4$=" " :D5$=" " :D6$=" "
820 PRINT :PRINT:PRINT CHR$(26)
830 PRINT TAB(18);"PAGE FORMAT MENU"
840 PRINT:PRINT :PRINT TAB(12);"Standard "
850 PRINT TAB(13);"Values"
860 PRINT TAB(6);["D1$"];TAB(14);["C1$"]; 1 SKIP PERFORATION"
870 PRINT TAB(6);["D2$"];TAB(14);["C2$"]; 2 SET PAPER WIDTH"
880 PRINT TAB(6);["D3$"];TAB(14);["C3$"]; 3 SET PAPER LENGTH IN INCHES"
890 PRINT TAB(22);"OR"
900 PRINT TAB(6);["D4$"];TAB(14);["C4$"]; 4 SET PAPER LENGTH IN LINES"
910 PRINT TAB(6);["D5$"];TAB(14);["C5$"]; 5 SET LINE SPACING"
920 PRINT TAB(6);["D6$"];TAB(14);["C6$"]; 6 8TH BIT OFF OR ON"
930 PRINT:PRINT TAB(21);"7 GO TO PRINT MODE MENU"
940 PRINT:PRINT TAB(21);"8 TO EXIT"
950 PRINT:PRINT "ENTER OPTION NUMBERS AND PRESS RETURN AFTER EACH ONE"
960 INPUT CHOICE%
970 ON CHOICE% GOTO 1000,1070,1140,1230,1300,1390,220,1430
980 PRINT "ENTER ONLY 1 THROUGH 7":GOTO 950
990 '
1000 INPUT "Spaces to skip";P
1010 IF P=0 THEN LPRINT CHR$(27) "O";:D1$=" " :GOTO 820
1020 IF P>0 AND P<10 THEN D1$=" "+STR$(P)
1030 IF P>9 AND P<100 THEN D1$=STR$(P)
1040 IF P>99 THEN D1$=RIGHT$(STR$(P+1000),3)
1050 LPRINT CHR$(27) "N"CHR$(P);:GOTO 820
1060 '
1070 INPUT "Number of spaces for paper width";W
1080 IF W=0 THEN PRINT "ZERO WIDTH IS NOT POSSIBLE":GOTO 1070
1090 IF W>0 AND W<10 THEN D2$=" "+STR$(W)
1100 IF W>9 AND W<100 THEN D2$=STR$(W)
1110 IF W>99 THEN D2$=RIGHT$(STR$(W+1000),3)
1120 LPRINT CHR$(27) "Q"CHR$(W);:GOTO 820
1130 '
1140 PRINT "Number of inches for paper length"
1150 INPUT "Enter a number from 1 to 22";I
1160 IF I=0 THEN PRINT "ZERO LENGTH IS NOT POSSIBLE":GOTO 1140
1170 IF I>0 AND I<10 THEN D3$=" "+STR$(I)

```

Figure 4. A listing of PRINT.BAS, an MBASIC program for sending print codes to an Epson printer.

continued on page 23

Welcome Back Offer!

From:



Description	Part Number	Price	Quantity	Total Price
Osborne 1 Start Pac	2G08000-00	\$25.00		
Osborne 1 Tech Man	2F00153-00	\$45.00		
OCC 1 Comm Pac	2B50000-00	\$100.00		
OCC 1 Power Pac	2B60000-00	\$125.00		
OCC 1 D/D Bundled S/W	2D10306-01	\$55.00		
OCC 1 SD Blue Manual	3F00001-00	\$10.00		
OCC 1 DD Grey Manual	2F00161-01	\$18.00		
OCC 1 Fan Kit*	6K00021-01	\$55.00		
Executive w/1-year**	2K00000-01	\$1595.00		
Executive w/90-day***	2K00000-90	\$1445.00		
Exec Diagnostic Disk	3D01002-01	\$55.00		
Exec BIOS Enhancement	3D10500-01	\$25.00		
Exec 1.21 ROM Upgr.*	6K00040-02	\$45.00		
Exec Comm Pac Modem	2B50001-01	\$175.00		
Exec Modem Update Kit	2B50001-02	\$75.00		
Exec Technical Manual	2F00213-01	\$125.00		
BASCOM	2G00901	\$225.00		
BSTAM	2G00201	\$95.00		
DATASTAR	2G01001	\$225.00		
DEADLINE	2G00530	\$40.00		
DISK DOCTOR	2G00401	\$65.00		
DOCUMATE PLUS	2G00301	\$115.00		
FOOTNOTE	2G03901	\$55.00		
FORTH	2G00801	\$125.00		
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MATH STAR	2G04801	\$35.00		
MILESTONE	2G01501	\$195.00		
MONEY MAESTRO	2G01801	\$125.00		
MUMATH	2G01301	\$145.00		
PERSONAL DATEBOOK	2G01401	\$95.00		
PERSONAL PEARL	2G01601	\$195.00		
REAL ESTATE CALCAID	2G04901	\$65.00		
SPELLGUARD	2G00601	\$195.00		
STAR CROSS	2G02001	\$40.00		
SUPERSORT	2G01101	\$155.00		
SYSTEM CHECKER	2G04001	\$35.00		
WORD PAC	2G00702	\$225.00		
ZORK 1	2G06100	\$40.00		

Osborne Computer Corporation

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Hayward, California 94545
415-887-8080
TWX 910-383-2021

TOTAL PRICE for goods ordered:

California Residents Add 6.5% Sales Tax
Plus Handling

\$10.00

TOTAL AMOUNT TO BE SENT WITH ORDER:

Name _____
Address _____
City, State, Zip _____
Method of Shipment _____

Please send your order and **cashier's check** or **money order** payable to:**Osborne Computer Corporation, 26538 Danti Ct., Hayward, CA 94545.**For payment by charge card: ☐ Visa ☐ Mastercard Exp. date _____

Signature required: _____ MC _____

Card # _____


```

1180 IF I>9 AND I<100 THEN D3$=STR$(I)
1190 IF I>99 THEN D3$=RIGHT$(STR$(1+1000),3)
1200 LPRINT CHR$(27)"C"CHR$(0)CHR$(I);:GOTO 820
1210 "
1220 PRINT "Number of lines for paper length"
1230 INPUT "Enter a number from 1 to 127";L
1240 IF L=0 THEN PRINT "ZERO LENGTH IS NOT POSSIBLE":GOTO 1220
1250 IF L>0 AND L<10 THEN D4$=" "+STR$(L)
1260 IF L>9 AND L<100 THEN D4$=STR$(L)
1270 IF L>99 THEN D4$=RIGHT$(STR$(L+1000),3)
1280 LPRINT CHR$(27)"C"CHR$(L);:GOTO 820
1290 "
1300 PRINT "Sets line spacing in 1/216ths of an inch."
1310 PRINT "3/216= 1/72; 21/216= 7/72; 27/216=1/8"
1320 INPUT "Enter a number between 1 and 255";S
1330 IF S=0 THEN PRINT "ZERO SPACING IS NOT POSSIBLE":GOTO 1320
1340 IF S>0 AND S<10 THEN D5$=" "+STR$(S)
1350 IF S>9 AND S<100 THEN D5$=STR$(S)
1360 IF S>99 THEN D5$=RIGHT$(STR$(S+1000),3)
1370 LPRINT CHR$(27)"3"CHR$(S);:GOTO 820
1380 "
1390 INPUT "Choose ON or OFF";O$
1400 IF O$="ON" THEN 1410 ELSE 1420
1410 LPRINT CHR$(27) ">";:C6$="ON":D6$=" ":GOTO 820
1420 LPRINT CHR$(27) "=";:C6$=" ":D6$="OFF":GOTO 820
1430 IF A1$="ON" THEN LPRINT "COMPRESSED"
1440 IF A2$="ON" THEN LPRINT "DOUBLE WIDTH"
1450 IF A3$="ON" THEN LPRINT "DOUBLE STRIKE"
1460 IF A4$="ON" THEN LPRINT "EMPHASIZED"
1470 IF A5$="ON" THEN LPRINT "SUPERSCRIP"
1480 IF A6$="ON" THEN LPRINT "SUBSCRIPT"
1490 IF A7$="ON" THEN LPRINT "UNDERLINE"
1500 IF A8$="ON" THEN LPRINT "ITALICS"
1510 PRINT CHR$(26):PRINT
1520 INPUT "DO YOU WANT TO EXIT TO CP/M"; S$
1530 IF S$<>"Y" THEN 1550
1540 LPRINT CHR$(12): SYSTEM
1550 PRINT:PRINT "EXIT FROM PROGRAM"
1560 END

```

Continued from page 21

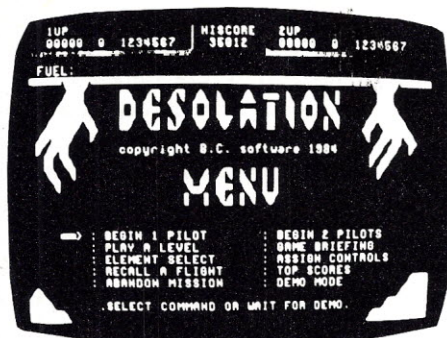
LPRINT CHR\$(10) if you would like a line feed instead. Or nothing at all for the printer head to stay where it is. SYSTEM is an MBASIC command to close files and return to CP/M.

We have made an effort to eliminate all bugs and provide prompts in appropriate places — like TURN ON PRINTER — so that when you have forgotten all about it and run the program again, it will save you from the more obvious errors. Leave them out at your peril!

Pat Watters is treasurer of the FOG Affiliated Member Organization East Bay FOG, 307 Elwood Ave., Oakland, CA 94610.

Figure 4. A listing of PRINT.BAS, an MBASIC program for sending print codes to an Epson printer.

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Reverse Video and a Faster Serial Port

*For Osborne 1 owners: how to change your serial port baud rate,
and how to change your underline cursor to a reversed-video one.*

Thom Hogan

Warning

This article describes how to modify your Osborne 1. If you have a warranty still in effect (such as one through the Xerox® Americare® program or other such service), you should not perform the modification without becoming fully aware of the consequences.

While Osborne Computer Corporation may be gone, about 150,000 Osborne 1 computers aren't, and their users have no direct factory support and only scant information concerning the workings of the machine.

This article addresses two aspects of the Osborne 1 that many owners wish could be changed: the way in which the cursor displays, and faster baud rates for the serial port. This information, while developed internally by the company, was not promoted by Osborne Computer Corporation for a number of reasons, the primary of which was the problem of warranty repair on modified machines.

Don't attempt these modifications yourself if you are not qualified. You will be making cuts, adding jumpers, and sol-

dering directly on integrated circuits if you follow these instructions. A slip of the soldering iron can be fatal (at least to the Osborne 1). If you want the modifications but haven't worked with delicate electronic components before, see if your local computer dealer or someone in your local Osborne user's group is willing to make them for you. Expertly done, the modifications shouldn't take more than an hour to make, and the parts cost is minimal — so \$50-\$100 is a reasonable fee for the work.

The end result of the modifications will be a computer that has an easily-recognizable cursor and is capable of communicating at as fast as 9600 baud.

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Reversing the Cursor

During my short tenure at Osborne Computer Corporation (1981-1982) as manager of the software and publications departments and as a key member of the new product design council at the company, I had argued that the underline cursor on the Osborne 1 was not appropriate, especially considering the small screen — you just couldn't find it fast enough during the word processing. I discussed this problem with the computer's designer, Lee Felsenstein, who informed me that at one time the Osborne 1 computers had reverse video, but that the cursor was switched to an underline before production.

To make a long story short, I had Lee rework my Osborne 1, and started a

Reverse Video Schematic Change

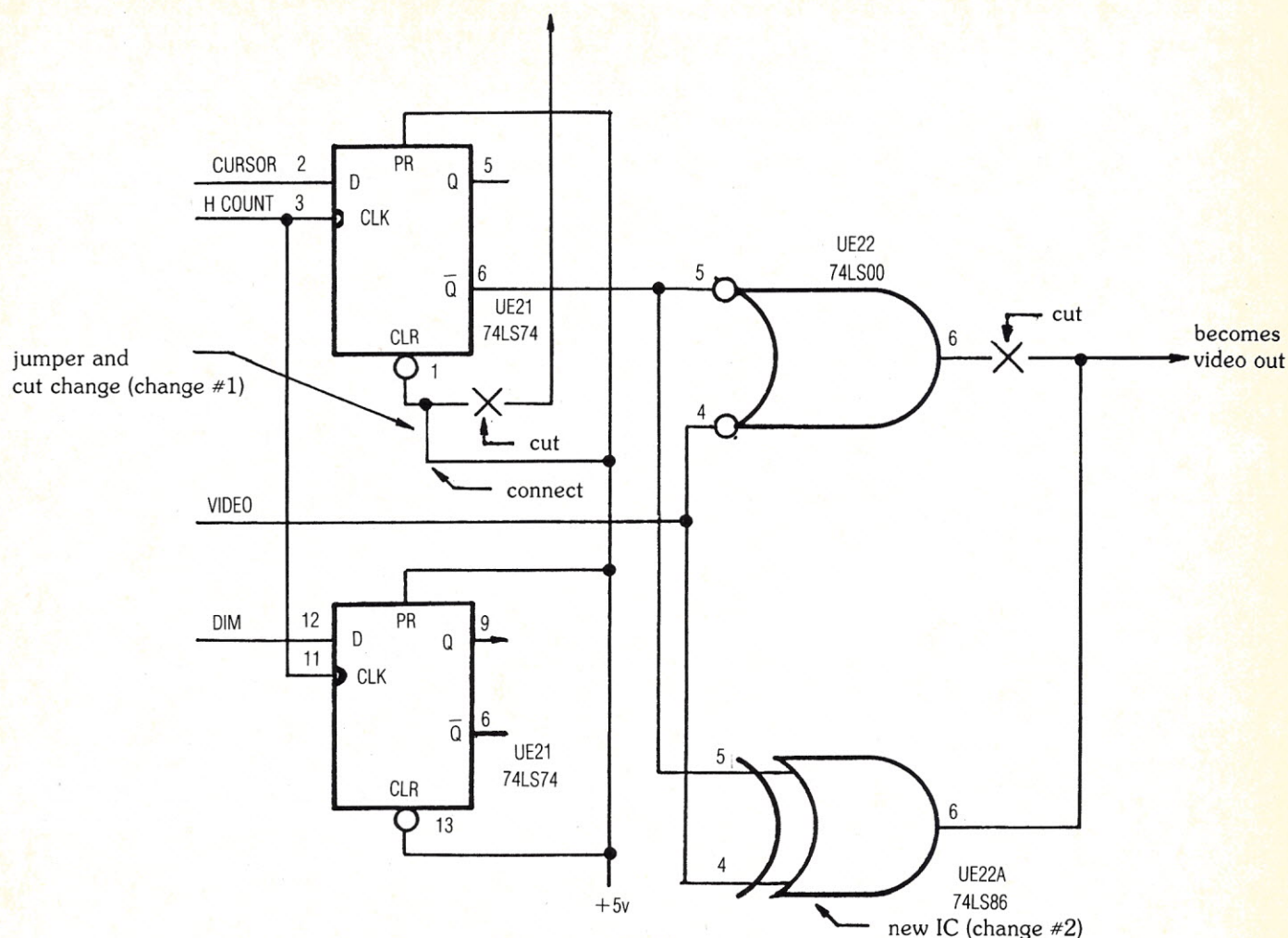


Figure 1. A schematic of the reverse video cursor modification and how it affects the original circuitry.

long vigil of trying to convince others in the company to make this permanent change. No luck. How about publishing the modifications? No luck there either, as the company was worried about the legal implications of publishing modifications.

The modification for reverse video cursor is actually quite simple. Currently, the video goes through one portion of a 74LS00 logic gate just prior to heading towards the video display. Simply switching the type of logic gate used, and making one small cut on the electronics board gives a reverse video cursor. Figure 1 shows a schematic of the modification and how it affects the original circuitry.

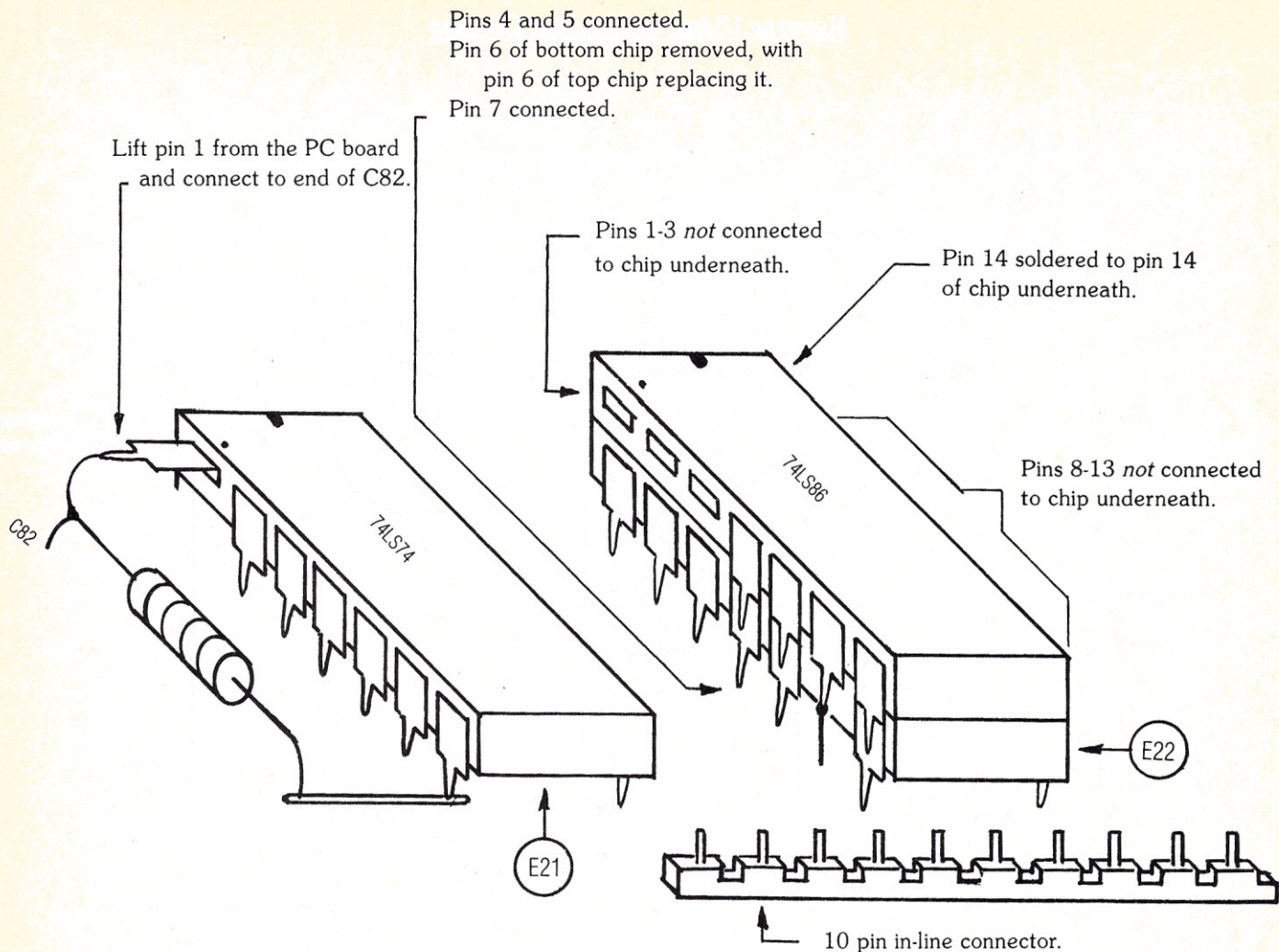
Logical considerations aside, the practical problems of changing the gate used to implement the cursor became important — we don't want to have to unsolder an IC, since that's not an easy process. Besides, the rest of the 74LS00 is needed for some other functions. Instead, we'll simply piggyback a new IC on top of the old one, and make our connections to it. Such a practice is relatively common for minor changes such as we are making.

First, you'll have to open up the Osborne 1 case and remove the main electronics board. If you don't already know how to do this, you shouldn't be making this modification! Opening the Osborne 1 is a simple process. Make

sure that you note the orientation of the various cables as you unplug them.

Now we're ready for the delicate work. All you need is two short lengths of wire-wrap or other suitable wire and a 74LS86 to perform the change. Let's work in an ordered, logical fashion:

1. Take the 74LS86 chip and carefully cut off pins 1-3 and 8-13 as close to the plastic housing as possible. We aren't going to use these pins.
2. While you've got the snips out, very carefully cut off pin 6 of IC UE22, the 74LS00 located at position E22 on the main circuit board.



NOTE: ICs shown are located at board positions E21 and E22.

Figure 2. The modifications to the ICs located at board positions E21 and E22 to produce a reverse video cursor.

3. Next, carefully lift pin 1 of UE21, the 74LS74 located at position E21 on the main circuit board.
4. Place the 74LS86 on top of the 74LS00 at E22. You're going to solder pins 4, 5, 7, and 14 of the two chips together (make sure that the chips are oriented the same direction!).

5. Take a short length of wire-wrap wire, strip both ends to a length of about 1/4 inch. Tack solder one end to pin 6 of the 74LS86, following the cautions described above. Solder the other end into the solder pad previously occupied by pin 6 of the 74LS00. Make sure that you don't create any solder bridges when you do this.
6. Next, take another short length of stripped wire-wrap wire and connect one end it to pin 1 of the

74LS74, which you lifted its solder pad in step 3. The other end of this wire goes to the nearest end of the C82 (immediately to the left of the IC), as shown in the illustration in Figure 2.

That's it! A few cuts and a few solder tacks and we're done. A professional wouldn't take more than 30 minutes making this modification, and most of that would be dis-assembling and assembling the computer.

Reconnect all cables, making sure

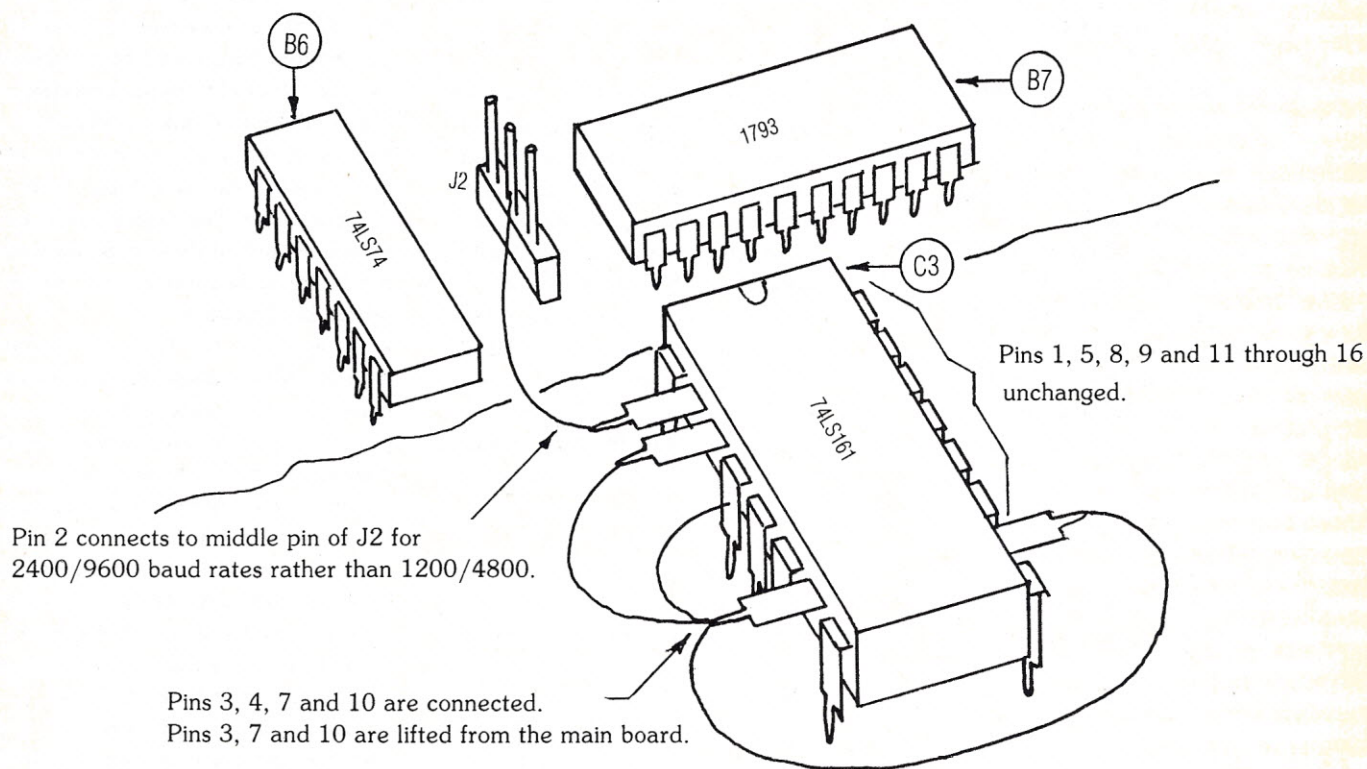


Figure 3. Modifying the LS161 or LS163 IC at location C3 on the Osborne 1 main electronics board, to get a combination of faster baud rates for the serial port.

that you properly align pin 1 (offsetting some of the cables can result in a very dead electronics board) and re-assemble the computer. When you turn the computer on, the cursor should be a nice solid white block.

As an interesting side benefit, changing the cursor with the above modification also results in underlined characters now being displayed in reverse video.

The SuperCalc prompt, for example, becomes a solid reverse video bar instead of a thin underline.

If you used the public domain "blinking cursor program" (available from Osborne user groups) on your version of WordStar, you'll now have a blinking solid block. However, even without this software patch, it should be easy for you to find the cursor.

Speeding up the Serial Port

Our second change involves the serial port on the Osborne 1 computer. This change appears on page 21 and 22 of the Osborne 1 Technical Manual. Mike Iannamico and I, co-authors of the manual, managed to sneak this modification past the "engineering-powers-that-

were," but it is buried at the end of the Interface Design chapter, and many people who've read the manual didn't even notice it.

The Osborne 1 is capable of communicating at two baud rates. Normally, this is 300 and 1200 baud, the most commonly-used communication rates. By opening the computer and removing jumper J1, these baud rates are doubled, to 600 and 2400, respectively (note that the SETUP program used to change the baud rates still displays 300 and 1200 — jumper J cannot be sensed from the software, thus the message remains the same in SETUP).

The upper limit of 2400 baud was chosen for a number of reasons. First, the parts purchased by Osborne for the serial interface were only specified to have to work up to this rate (almost all work at far greater rates, however). Second, the fastest an Osborne 1 could function as a terminal (i.e., displaying received information and sending typed information) was 2400 baud — any faster and characters would be lost, since the software could not keep up with the hardware.

Nevertheless, the Osborne 1 is quite capable of receiving and sending information at higher baud rates, just as long as it doesn't have to display it or save it to disk while doing so. Four possible baud rate choices exist, two of which involve modifications:

- 300/1200 As the Osborne 1 comes.
- 600/2400 Remove jumper J1 inside the Osborne.
- 1200/4800 Basic modification described below.
- 2400/9600 basic modification plus additional wire.

Again, we'll be dealing with an IC soldered into the main electronics board of the Osborne 1 — in this case, UC3, a LS161 or LS163 at location C3. The Osborne 1 Technical Manual suggests that you de-solder this chip and replace it with a 16-pin socket. This is preferable to simply lifting and bending pins, especially if you may want to switch back and forth between pairs of baud rates at a future date.

Here's how to perform the baud rate modification (see figure 3):

1. Pins 2, 3, 7, and 10 of the 74LS161 (or 74LS163) must be lifted off the solder pads they are currently connected to. You may de-solder the chip, install a socket, bend these four pins up on the 74LS161 and re-insert it into the socket, or you may simply de-solder those four pins and bend them up.
2. Using wire-wrap wire, connect pins 3, 4, 7, and 10 together. Make sure only these pins are connected — solder bridges to other pins can cause problems. At this point, you have 1200/4800 baud instead of 300/1200 baud — where the SETUP program refers to the 300 baud, you get 1200, where SETUP says 1200, you get 4800. Jumper J1 may be in or out — it won't affect the transmission speed with this modification completed.
3. If you want the fastest baud rate combination, connect a wire from pin 2 of the 74LS161 to the middle pin on jumper J2 (located between 74LS74 at B6 and the 1793 at B7). You now have 2400 baud in place of 300 baud, and 9600 baud in place of 1200 baud.

That's all there is to it. Any cable that works correctly at the slower baud rates (i.e., handles the hardware handshake protocol of the serial port without losing characters) will work at these new, faster rates. The XON/XOFF protocol should still function correctly. It's as if you had given your Osborne 1 a shot of high octane gas — transmissions and receptions move faster.

One Last Caution

Toward the end of Osborne 1 production history Osborne started receiving a new, multi-layered main logic board. I was unable to ascertain, from my contacts at the company, when and how many of these multi-layered boards were put into production. Soldering directly on a multi-layer board can be quite tricky, because you may get the connec-

tion on the surface, but fail to make contact underneath. If you have a late model Osborne 1 and have problems with the modification, the multi-layered board may be the culprit — have a professional repair technician look at your work and check it out.

These two changes are by no means all the modifications that can be performed on an Osborne 1. Osborne experimented by created prototypes with 80-track drives (368k per diskette), double-sided drives (736k per diskette), and had even replaced the B drive with a half-height winchester-type hard disk and controller. The primary problem involved in each of these changes was not hardware (slide out one drive, slip in another), but software.

In addition, the Osborne Executive logic board was originally designed to fit in the Osborne 1 case and provide an upgrade to 80 columns (with a few other niceties thrown in). A seven-inch monitor version of the Osborne 1 was discussed, but rejected in favor of the Executive 1. Indeed, a whole new computer, code-named Vixen, was designed. It had everything a fully equipped Osborne 1 did (and more), but weighed in at 18 pounds and measured only half the size.

On the purely software side, I prepared a 52-column version of WordStar in mid-1982, but the then-promised release by MicroPro of a new version of WordStar cancelled the release of the 52-column version. The UCSD p-system was worked up for the Osborne 1 double-density option, but again, new version releases pushed back the introduction date until it was too late. A new HELP utility was also put together, as were a few other simple upgraded offerings, but most of these never saw the dealer's shelves, either.

(Fortunately, the plan to re-organize Osborne Computer Corporation is up for final approval. If and when that happens, we will report the latest product offerings — editors).

It is my hope in offering these two modifications that Osborne 1 computers will continue to be put to good use. Perhaps, when all the dust has settled, some of these modifications will become part of service agreements or new products. We Osborne 1 owners can only hope.



Rescue From Toxic Spills

The program GAUSS calculates a Gaussian dispersion model of gases released from a toxic spill. It runs on an Osborne 1 or Executive under MBASIC.

William White

A tank truck carrying a toxic chemical is traveling along a rural road near a south California community. In the early Sunday morning hours, a light fog hangs over the valley making the winding road treacherous. A passenger car in the opposite lane has a blowout. Car and truck collide. Tires screech, metal crunches, radiators hiss, and then almost silence. The driver of the car lies unconscious on the roadway, his vehicle wedged under the tank truck, now punctured and leaking. The truck driver scrambles from the cab, stunned but apparently uninjured. The truck driver quickly calls for police and fire assistance. Upon questioning by the police dispatcher, the driver reads the shipping manifest. He informs the dispatcher that

the chemical he is hauling is anhydrous ammonia.

The dispatcher calls CHEMTREC (Chemical Transportation Emergency Center) for instructions on how to handle the chemical spill. After providing brief directions on handling the spill, the CHEMTREC duty officer calls the truck firm and the shipper. Within minutes your phone rings waking you from an enjoyable dream. As Transportation Emergency Team Leader for your company,

you are requested to go to the scene and render assistance. You phone your plant and request that other team members be dispatched with the vehicle containing various patching devices.

On the way to the scene, many thoughts race through your head. How bad is the leak? Will you be able to stop it with the emergency capping kit? Has anyone been exposed to the chemical? Have people been evacuated from the downwind areas? Will the news media

As you drive back home to your sleeping family, you realize that your fast response and accurate information to the fire chief would not have been possible without your Osborne.

```

100 '!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
110 'EMERGENCY RELEASE RESPONSE SYSTEM
120 'COPYRIGHT (C) 2/15/83 BY WILLIAM WHITE
130 '!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
140 'VARIABLE LIST
150 'C=GROUND LEVEL CONCENTRATION IN PPM
160 'Q=RELEASE RATE IN LB/HR
170 'Q1=RELEASE RATE IN CUBIC FEET/SEC AT ATMOS. TEMP
180 'U=WIND SPEED IN MPH
190 'U1=WIND SPEED IN FEET/SEC
200 'MW=MOLECULAR WEIGHT
210 'TITL$=CHEMICAL NAME
220 'LETHAL=LETHAL EXPOSURE LIMIT PPM
230 'SHORT=SHORT TERM EXPOSURE LIMIT PPM
240 'CEIL=THRESHOLD LIMIT VALUE PPM
250 'X=DOWNWIND DISTANCE FT
260 'Y=MIN SAFE CROSSWIND DISTANCE FROM CENTERLINE FT
270 'H=EFFECTIVE STACK HEIGHT
280 'TY=CROSSWIND PLUME STANDARD DEVIATION FT
290 'TZ=VERTICAL PLUME STANDARD DEVIATION FT
300 '!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
310 DIM MW(6),TITL$(6),LETHAL(6),SHORT(6),CEIL(6)
320 PRINT CHR$(26)
330 PRINT"CAUTION: THIS PROGRAM WAS DEVELOPED PRIMARILY FOR"
340 PRINT"ILLUSTRATIVE PURPOSES AND SHOULD BE APPLIED"
350 PRINT"WITH CARE. THE EQUATION USED IS A GAUSSIAN"
360 PRINT"DISPERSION MODEL FOR SINGLE ISOLATED STEADY "
370 PRINT"STATE POINT RELEASE AT AN EFFECTIVE STACK HEIGHT"
380 PRINT"OF 25 FT. UNDER NEUTRAL TURBULENCE CONDITIONS."
390 PRINT:PRINT:PRINT
400 INPUT "ENTER RELEASE RATE (LB/HR) ";Q
410 INPUT "ENTER WIND SPEED (MPH) ";U
420 PRINT"ENTER TYPE OF MATERIAL:"
430 PRINT"1= CHLORINE           2= AMMONIA"
440 PRINT"3= BUTADIENE          4= LIQUIDIFIED PETROLEUM GAS"
450 PRINT"5= HYDROGEN CYANIDE   6= CYCLOHEXANE"
460 INPUT NGAS:IF NGAS<1 OR NGAS>6 THEN 460
470 FOR N=1 TO 6
480 READ TITL$(N),MW(N),LETHAL(N),SHORT(N),CEIL(N)
490 NEXT N
500 Q1=Q*414/(3600*MW(NGAS))
510 PRINT CHR$(26)
520 PRINT"EMERGENCY RELEASE RESPONSE SYSTEM"
530 PRINT USING"RELEASE RATE ##### LB/HR      LETHAL= #####.# PPM"
    ;Q,LETHAL(NGAS)
540 PRINT USING"WIND SPEED ##### MPH      SHORT = #####.# PPM"
    ;U,SHORT(NGAS)
550 PRINT USING"MATERIAL \          \ TLV  = #####.# PPM"
    ;TITL$(NGAS),CEIL(NGAS)
560 PRINT:PRINT:GOSUB 820
570 PRINT
580 X=0
590 H=25
600 U1=U/.682
610 FOR I=1 TO 53

```



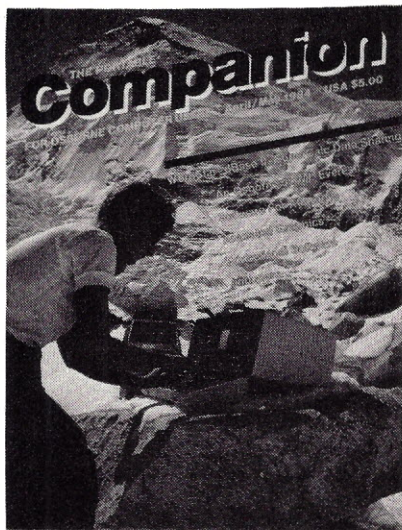
```

620 X=X+500
630 Y=0
640 TY=.2*X^.86
650 TZ=.25*X^.71
660 B=EXP(-(H^2)/(2*TZ^2))+((Y^2)/(2*TY^2)))
670 C=Q1*B*10^6/(3.14156*TY*TZ*U1)
680 QA=(Q1/(CEIL(NGAS)*10^(-6)*3.14156*TY*TZ*U1))
690 IF QA<1 THEN Y=0
700 IF QA<1 THEN 720
710 Y=SQR((2*TY^2)*(LOG(QA)))
720 IF C>LETHAL(NGAS) THEN C#=">LETHAL"ELSE C#=">SHORT"
730 IF C<SHORT(NGAS) AND C>CEIL(NGAS) THEN C#=">TLV"
740 IF C<CEIL(NGAS) THEN C#="<TLV"
750 XMIN=X/(U*60)
760 XMIL=X/5280
770 LON$="#####    ###.##    ###.#    #####.#    \    \#####.##"
780 PRINT USING LON$;X,XMIL,XMIN,Y,C#,C
790 IF I=10 OR I=20 OR I=30 OR I=40 THEN GOSUB 820
800 NEXT I
810 END
820 INPUT W
830 PRINT"DISTANCE FROM RELEASE    CROSSWIND    CENTERLINE"
840 PRINT"    FT        MILES    MIN        FT        CONC        PPM"
850 RETURN
860 DATA CHLORINE,27,135,45,5
870 DATA AMMONIA,17,2500,300,50
880 DATA BUTADIENE,54,11.5,11.5,2
890 DATA LIQUID PETROLEUM GAS,54,11,11,2
900 DATA HYDROGEN CYANIDE,27,135,45,5
910 DATA CYCLOHEXANE,84,10000,3330,300

```

Figure 1. The GAUSS program written in MBASIC.

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be on the scene? Who is in charge of the situation?

As you arrive at the scene, you find the four police cars, two fire department vehicles, and five news media vehicles parked too close to the truck. The fire chief is in charge and has evacuated people out of the path of the visible plume. After you identify yourself as your company's representative and volunteer your expertise in handling ammonia you are escorted to the fire chief. Yes, he is more than willing to accept your help and advise. He explains the action he has already taken.

Your job, as your company's expert, is to assist in protecting the public and the environment. You ask the fire chief to contact the local airport to obtain the wind speed and direction. You return to your car and get your Osborne computer ready to operate. As you plug the cord into your cigarette lighter outlet, several firemen curiously look on. You insert a diskette with MBASIC and GAUSS into drive A and boot up.

The fire chief walks over and reports that the wind speed is 2 mph. You estimate the ammonia is escaping at a rate of 2000 lbs/hr. Entering this data into GAUSS, you advise the fire chief that he should evacuate everyone in the area one mile downwind and 300 feet on either side of the centerline of the release. You also advise him that his men with self-contained breathing air should begin a search of the area immediately downwind of the leak, in a corridor 200 feet wide by 1500 feet long. Although the gas concentration did not exceed the lethal limit, someone may have been exposed to enough ammonia to cause irritation. The rest of your team arrives with the emergency capping kit and after donning protective suits they quickly stop the leak. No one other than the driver of the car was injured or exposed to the toxic ammonia fumes.

As you drive back home to your sleeping family, you realize that your fast response and accurate information to the fire chief would not have been possible without your Osborne. The portability of the Osborne allows you to take vital programs with you to the scene.

CAUTION: THIS PROGRAM WAS DEVELOPED PRIMARILY FOR ILLUSTRATIVE PURPOSES AND SHOULD BE APPLIED WITH CARE. THE EQUATION USED IS A GAUSSIAN DISPERSION MODEL FOR SINGLE ISOLATED STEADY STATE POINT RELEASE AT AN EFFECTIVE STACK HEIGHT OF 25 FT. UNDER NEUTRAL TURBULENCE CONDITIONS.

ENTER RELEASE RATE (LB/HR) 2000
 ENTER WIND SPEED (MPH) 2
 ENTER TYPE OF MATERIAL:
 1= CHLORINE 2= AMMONIA
 3= BUTADIENE 4= LIQUIDIFIED PETROLEUM GAS
 5= HYDROGEN CYANIDE 6= CYCLOHEXANE
 ? 2

EMERGENCY RELEASE RESPONSE SYSTEM

RELEASE RATE 2000 LB/HR LETHAL= 2500.0 PPM
 WIND SPEED 2 MPH SHORT = 300.0 PPM
 MATERIAL AMMONIA TLV = 50.0 PPM

?

DISTANCE FROM RELEASE	CROSSWIND	CENTERLINE	
FT MILES MIN	FT	CONC	PPM
500	0.09	4.2	111.3 >SHORT 815.12
1000	0.19	8.3	167.9 >SHORT 435.10
1500	0.28	12.5	204.6 >TLV 259.63
2000	0.38	16.7	226.8 >TLV 174.06
2500	0.47	20.8	236.4 >TLV 126.09
3000	0.57	25.0	233.6 >TLV 96.33
3500	0.66	29.2	216.9 >TLV 76.49
4000	0.76	33.3	181.3 >TLV 62.52
4500	0.85	37.5	108.7 >TLV 52.27
5000	0.95	41.7	0.0 <TLV 44.50

?

DISTANCE FROM RELEASE	CROSSWIND	CENTERLINE	
FT MILES MIN	FT	CONC	PPM
5500	1.04	45.8	0.0 <TLV 38.45
6000	1.14	50.0	0.0 <TLV 33.64
6500	1.23	54.2	0.0 <TLV 29.74
7000	1.33	58.3	0.0 <TLV 26.52
7500	1.42	62.5	0.0 <TLV 23.84
8000	1.52	66.7	0.0 <TLV 21.57
8500	1.61	70.8	0.0 <TLV 19.63
9000	1.70	75.0	0.0 <TLV 17.97
9500	1.80	79.2	0.0 <TLV 16.52
10000	1.89	83.3	0.0 <TLV 15.25

?

DISTANCE FROM RELEASE	CROSSWIND	CENTERLINE	
FT MILES MIN	FT	CONC	PPM
10500	1.99	87.5	0.0 <TLV 14.14
11000	2.08	91.7	0.0 <TLV 13.15
11500	2.18	95.8	0.0 <TLV 12.27
12000	2.27	100.0	0.0 <TLV 11.48
12500	2.37	104.2	0.0 <TLV 10.78
13000	2.46	108.3	0.0 <TLV 10.14
13500	2.56	112.5	0.0 <TLV 9.56
14000	2.65	116.7	0.0 <TLV 9.03
14500	2.75	120.8	0.0 <TLV 8.55
15000	2.84	125.0	0.0 <TLV 8.11

?

Program Description

The program GAUSS calculates a Gaussian dispersion model of gases released from a single point source at an effective elevation of 25 feet. The program as written assumes neutral turbulence in the atmosphere. The values of TY and TZ are from standard tables found in "Workbook of Atmospheric Dispersion Estimates" by D. B. Turner, published by the U. S. Dept. of Health, Education, and Welfare, Public Health Service Publication No. 999-AP-26 (revised 1969).

If you are familiar with the standard stability classifications and are able to judge the stability class, you can add another variable to use more specific values for TY and TZ. By extending the FOR-NEXT loop in statement 470 and adding more data statements, the program can be customized to handle any number of gases. Lines 100-300 contain variable definitions and may be omitted.

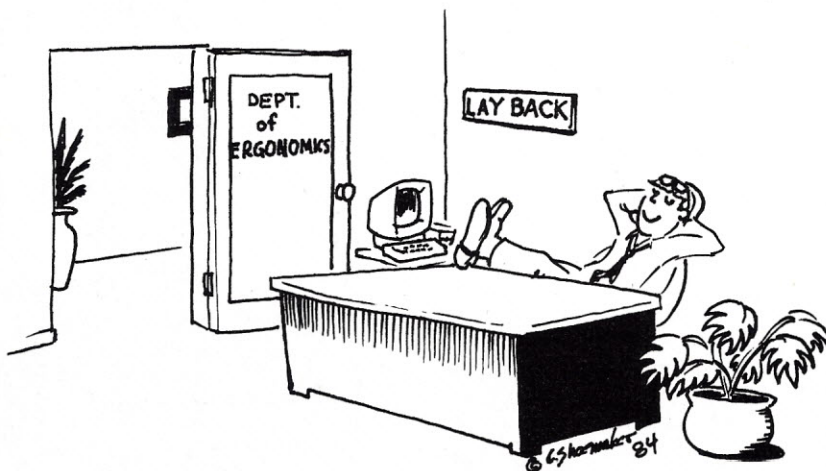
I recommend that you save the program both in the normal and the protected format. Under MBASIC a protected file is created by entering the command `SAVE "GAUSS.BAS",P`.

The output of the GAUSS program (shown in figure 2) lists the downwind distance from the release in feet, miles, and minutes. The crosswind distance that the cloud will spread as measured at the TLV concentration is shown. The cloud centerline concentration is shown in parts per million with indicators of above LETHAL, above SHORT TERM, above TLV, and below TLV. Sample "what if" runs prove to be very informative as well as surprising.

The Osborne presents some very interesting opportunities by virtue of its true portability. The capability to operate on the 12-volt power supply of an automobile extends its portability to any place you can drive. No longer will emergency service organizations have to use "rules of thumb" in accessing the seriousness of a given situation. By creative programing, which may include some simplifying assumptions, the best knowledge can be transported to where it is needed.

DISTANCE FROM RELEASE			CROSSWIND	CENTERLINE	
FT	MILES	MIN	FT	CONC	PPM
15500	2.94	129.2	0.0	<TLV	7.70
16000	3.03	133.3	0.0	<TLV	7.33
16500	3.13	137.5	0.0	<TLV	6.99
17000	3.22	141.7	0.0	<TLV	6.67
17500	3.31	145.8	0.0	<TLV	6.37
18000	3.41	150.0	0.0	<TLV	6.10
18500	3.50	154.2	0.0	<TLV	5.84
19000	3.60	158.3	0.0	<TLV	5.60
19500	3.69	162.5	0.0	<TLV	5.38
20000	3.79	166.7	0.0	<TLV	5.17
?					
DISTANCE FROM RELEASE			CROSSWIND	CENTERLINE	
FT	MILES	MIN	FT	CONC	PPM
20500	3.88	170.8	0.0	<TLV	4.98
21000	3.98	175.0	0.0	<TLV	4.79
21500	4.07	179.2	0.0	<TLV	4.62
22000	4.17	183.3	0.0	<TLV	4.45
22500	4.26	187.5	0.0	<TLV	4.30
23000	4.36	191.7	0.0	<TLV	4.16
23500	4.45	195.8	0.0	<TLV	4.02
24000	4.55	200.0	0.0	<TLV	3.89
24500	4.64	204.2	0.0	<TLV	3.76
25000	4.73	208.3	0.0	<TLV	3.65
25500	4.83	212.5	0.0	<TLV	3.54
26000	4.92	216.7	0.0	<TLV	3.43
26500	5.02	220.8	0.0	<TLV	3.33

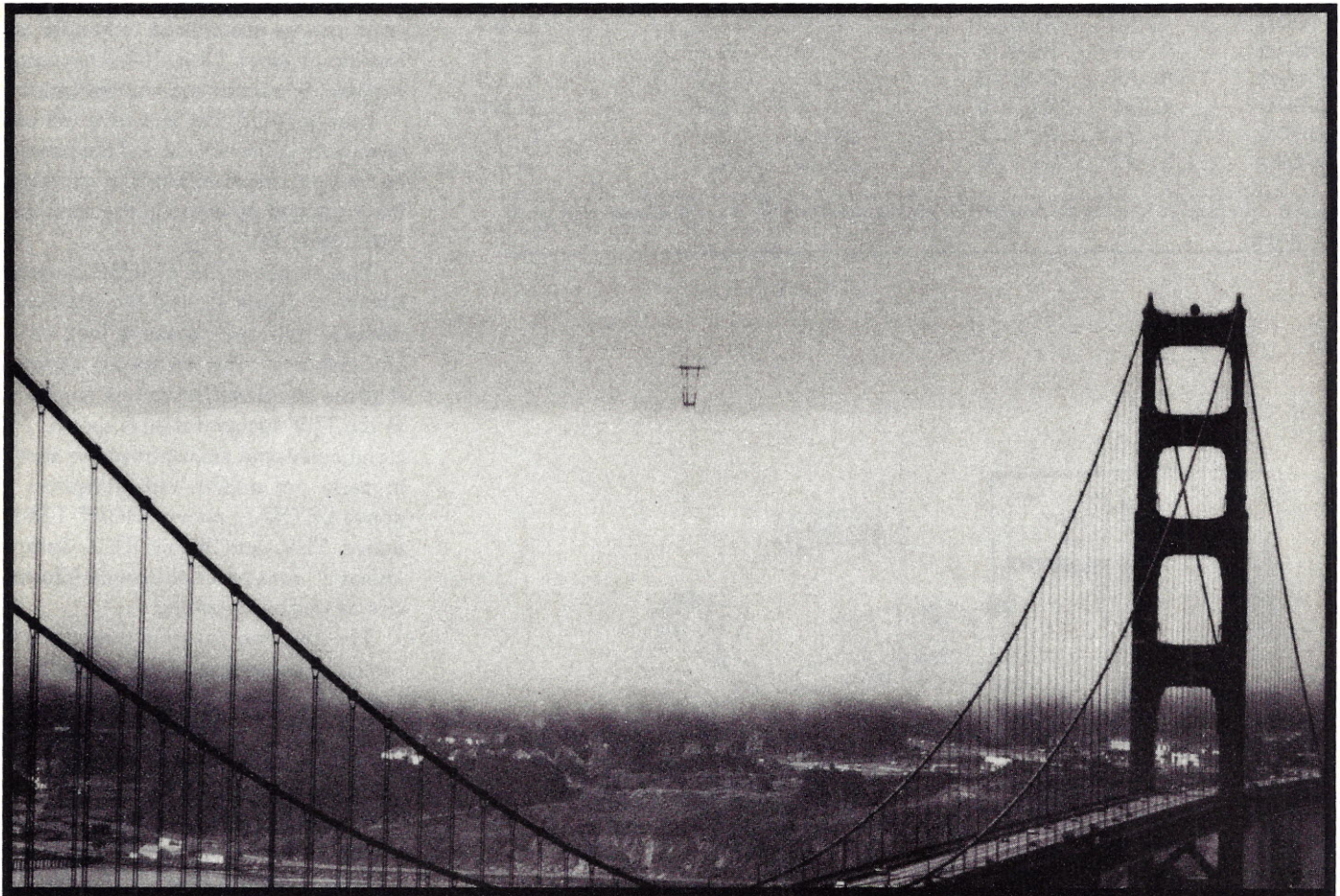
Figure 2. The output of the GAUSS program lists the downwind distance from the release in feet, miles, and minutes.



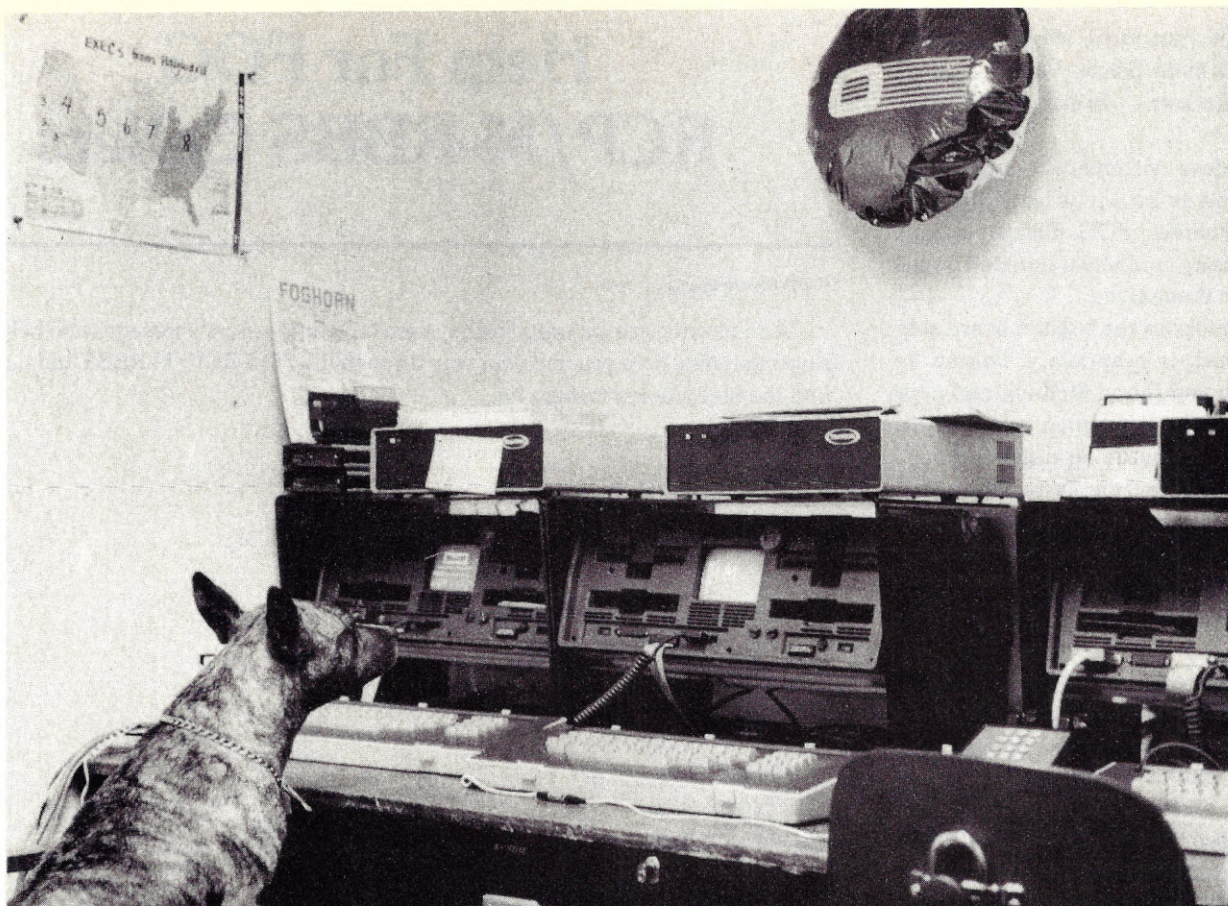
The FOG RCPM/RBBS: Software & Information

*Free public domain software, application notes, and tips
and techniques on using the Osborne 1 and Executive*

Paul Winternitz



The goal is to provide help to users. No matter where you live, you can get access to public domain programs, because the FOG network is the closest thing yet to an "outreach" program to Osborne and other computer users.



We get sixty to one hundred calls a day, every day!" she exclaims, patting the souped-up Osborne 1 computer that at that very moment was answering another call from a user, "and somebody has to maintain the systems. I spend three-five hours a day maintaining them, which involves checking the messages every day, assigning access levels to new callers, installing new public domain software, and generally policing the bulletin boards." That somebody is First Osborne Group (FOG) Director Gale Rhoades. "We have over 650 active callers from as far away as Australia and Sweden."

What is it they're calling? A "bulletin board" you can reach by phone using any home computer or terminal, where you can scan messages or leave messages for other callers. The FOG office has two "remote bulletin board systems" (RBBS) you can call from your home computer. You can call either system and leave a message or retrieve messages and share information with other callers. You can also get *free pub-*

lic domain software directly from the remote systems.

Many readers of *Portable Companion* are familiar with FOG and public domain software; for those who are not, here is a brief synopsis (access information is at the end of the article).

FOG and the Public Domain

The First Osborne Group (FOG) was formed as a user's group for persons using or interested in portable computers and/or the CP/M disk operating system with related software. FOG was started in October 1981 by a small group of early buyers of the Osborne 1. The primary purpose was to organize a library of public domain software to run on the Osborne 1. A monthly publication called *FOGHORN* was quickly started to act as a focal point for the group's activities.

Today that library of public domain software has over 200 disks, and the original FOG, now with an office in Daly

City, CA (near San Francisco), is an umbrella organization for over 300 affiliate FOGs. At this time there are over 13,000 members worldwide.

The goal is to provide help to users. Gale Rhoades doesn't care where you live — you should have equal access to these programs, and the FOG network is the closest thing yet to an "outreach" program to Osborne and other computer users.

The FOG RCP/M-RBBS Network

Although there are a large number of bulletin board systems, many are not organized by a user groups, nor do they carry a complete set of public domain software. (See the accompanying list of RCP/M-bulletin board systems.)

The authorized FOG RCP/M-RBBS has the complete FOG public domain library. At this time there are four authorized FOG bulletin boards: RCP/M-RBBS #1 and #3 in Daly City, California

(near San Francisco), #4 in Belmont, California (near Silicon Valley), and #2 in Vancouver, British Columbia, Canada.

FOG does not intend to stop there. FOG wants to set up at least 35 or 40 more volunteer FOG-affiliate bulletin boards, using equipment donated by the operators themselves.

FOG supplies the bulletin board software (which is proprietary, written by Tim Gary and Byron McKay), and pays for the phone installation and monthly minimum charge. Long distance phone calls are paid by the system operator. The system operator supplies all the hardware, plus her or his time maintaining the system, helping new users log on, setting access levels, answering questions, etc.

With the recent case involving the bulletin board "bust" in Southern California, in which a system operator was arrested and his equipment confiscated because phone credit card numbers were posted by unknown callers, FOG is understandably nervous about lending its name to bulletin boards. "We have to be careful who we accept and we have to monitor the boards' usage," says Gale Rhoades. "If we catch a sysop allowing messages like phone credit card numbers to remain on the message system, we can call up the system and zap the software, putting it out of commission immediately."

The software, known as the Heavy METAL message system, can be set up to ask callers for their names and passwords. When you first call the system, METAL asks you to type your name and supply your own eight-character password. You are then granted access to the bulletin board system to read and leave messages.

But that's not all. You can use the bulletin board's operating system as a remote CP/M (RCP/M) system, from which you can retrieve public domain software. You are not allowed access to the CP/M system "behind" the bulletin board until you are assigned an access level by the "sysop." At the end of your first call, as you exit the message system, you leave a special comment to the "sysop" with your name, address, phone number and FOG membership number if you're a FOG member.

Help For FOG RCP/M-RBBS Callers

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The following are excerpts from system bulletins, callers' messages and help messages that may help you find your way through the FOG RCP/M-RBBS and help you find the files you are looking for.

Logging On

What's your name (or user ID)? Tony Bove ↵
[Checking for previous logon]

.....
Enter password? 123456

Is today 06/12/84 (y/n)?Y
[Updating logs]
[Loading the bbs]

Metal Message System. . (A Heavy BBS)
Version 3.0b

You are caller 3435 (User #699).
High message is 749.
There are 142 active messages.
Last message read was 735.

[Checking for msgs]
Sorry, no mail.

(? or HELP for help) Command: ?

Help With The BBS

Functions supported:

B or BULLETIN	-> Read the Bulletin file.
BYE	-> Log-off without comment option.
C or CPM	-> Go to RCP/M (Remote CP/M).
CH or CHAT	-> Ring the bell to talk to the sysop (SYStem OPERator).
E or ENTER	-> Leave a message for another user (or all users).
EX or EXPERT	-> Changes status from novice to expert user.
G or GOODBYE	-> Log-off with option to return or leave comment (new users should use this).
H or HELP	-> Display this listing of system commands.
J or JUMP	-> Jump to RCP/M (Remote CP/M).
K or KILL	-> Kill (remove) a message addressed to you.
M or MESSAGES	-> Gets list of messages addressed to you.

O or OTHERSYS	- > Gets a listing of the other RBBS or RCP/M systems which are part of the FOG network.
Q or QUICKSUM	- > Gives a listing of message subjects. You are prompted for the starting number.
R or READ	- > Read message(s). You are prompted for a message number.
REP or REPLY	- > Reply to the message you just read.
RP	- > Read new messages.
RS	- > Read messages in ascending order starting with the highest # from your last call. THIS IS BEST COMMAND TO USE FOR READING MESSAGES!!!
RR	- > Read messages in reverse order, starting with the latest message on the system.
S or SUMMARY	- > Summary of messages, including date and author. You will be prompted for starting number.
U or USERPARAMS	- > Allows you to change your password. You should do this if your password has been in anyway compromised.
W or WELCOME	- > Display the initial sign-on message. This is great if you want to save a copy to disk so you can print it out after logging off.
Y or YELL	- > Just like CHAT, this allows you to ask for assistance from the sysop.
X or XPERT	- > Changes status from novice to expert user. Save for next call with U.
#	- > List message status. This repeats information about the number of callers and messages.
?	- > Help. Displays this list.

Sample Messages

To see a summary of the current messages, use the S command:

(? or HELP for help) Command: s

Enter the Message number of the first message you wish to start scanning at.

You will be given a list of msgs from that number to the last message.

Msg # to start at (1-749) ?1

```

1 03/13/84 From: GALE RHOADES To: ALL USERS : (4) DATE ON THIS SYSTEM
19 03/15/84 From: GALE RHOADES To: ALL USERS : (15) ACCESS TO THE CP/M
146 03/30/84 From: TIM SILER To: ALL : (7) TRANTOR WEB NETWORK
152 03/30/84 From: JOE AMARO To: ALL : (5) TTY/TDD
157 03/28/84 From: GALE RHOADES To: ALL USERS : (15) DIR, LUDIR, TYPE
225 04/06/84 From: TOM DAY To: ORANGE CO. EXEC USERS : (8) COMMUNICATION
260 04/09/84 From: RICK BEAR To: ALL USERS : (17) ZORBAS anyone???
266 04/09/84 From: GREG DAHL To: ALL USERS : (35) USER-SUPPORTED 01 SOFTWARE
271 04/09/84 From: JONATHAN LAVIGNE To: ALL USERS : (6) Brother HR1
284 04/11/84 From: RICK BEAR To: ALL USERS : (6) ZORBA bios
303 04/13/84 From: MARSHALL FRIEDMAN To: ALL : (7) IBM UPGRADES
305 04/13/84 From: JOEL MCCLURE To: ALL USERS : (3) Dysan Digital Diagnostics
312 04/14/84 From: DICK EZZARD To: MYTERM AND MITE USERS : (14) Use of ^K
325 04/13/84 From: GALE RHOADES To: RANDAL FISHER : (14) TYPEL.OBJ
353 04/19/84 [R/325] From: GALE RHOADES To: RANDAL FISHER : (31) TYPEL.OBJ
365 04/23/84 From: NEAL SCHINSKE To: ALL USERS : (5) EDUCATIONAL SOFTWARE
396 04/28/84 From: PETER P. YU To: ALL USERS : (18) NUEVO 80 COL BOARD
398 04/28/84 From: MARK HERIOT To: ALL USERS : (5) New Osborne BBS
408 04/30/84 From: RICK BEAR To: STEVEN J. DAVIDSON, M.D. : (21) ZORBA
412 05/01/84 From: GERHARD BARTH To: ALL USERS : (31) UPLOADING MESSAGES
[more]
```

FOG members are allowed greater access into the CP/M area to retrieve software; non-members are given limited access but can retrieve most of the public domain software available. Access is defined in terms of disk drives and user areas in each drive.

All callers with access to CP/M have access to a public area. The "old standards" in the public domain library are available in the public area. The best, however, is reserved for FOG members who are paying for the system with their membership dues.

Hardware Specifics

The FOG RCP/M-RBBS software runs at this time on an Osborne 1, and soon it will also run on the Executive.

The Osborne 1 main circuit board was modified to run the bulletin board system. Because of the way the Osborne 1 serial port was originally set up, it does not have "carrier detect." Without "carrier detect" the computer can't tell when someone has hung up the phone without "saying goodbye" by typing BYE. The computer would be stuck in a loop as if the caller was still on, and no one would be able to call in.

"With some modifications to the logic board, we now have carrier detect in the RS-232 serial port," says Gail. "We don't use the modem port because it is harder to get the carrier detect." Now if someone hangs up without typing BYE, or if the phone connection is somehow cut off, the system will take three seconds to ready itself to answer the next call. The systems use the Hayes Smartmodem[™], which is capable of both 300 and 1200 baud transmission.

"Some modems that claim to be Hayes-compatible don't provide the DTR that remote systems need to function," says Gale. "Other modems have a high sensitivity to line noise at 1200 baud. The Hayes Smartmodem seems to be the most stable."

For hard disk storage, FOG uses the Trantor 33-megabyte hard disk, which plugs into the IEEE port on the Osborne 1. "I'm a fanatic about the Trantor hard disk," says an enthusiastic Gale. "I also like the Drive C memory disk [RAM used as a disk]. I am so used to having

the speed of the Trantor hard disk that I must use Drive C as a portable hard disk when I travel with the Osborne."

Trantor has new software to divide a hard disk into any desirable configuration of drives. For example, you can divide the 33-megabyte disk into four drives of eight megabytes each, or into a six drive configuration with drive A holding four megabytes, drive B holding six megabytes, etc. You can also specify a minimum size for file blocks. The RCP/M-RBBS uses an 8K block size because large library files, which are typically 70-90K, occupy relatively less space than they would with a smaller block size.

Gale uses the Trantor local-area-network software to connect four Osbornes together in the FOG office sharing one Trantor hard disk. This multi-user network of Osbornes runs the *FOGHORN* circulation and FOG membership operations. FOG is planning to use a new CompuPro System 10 sixteen-bit multi-user system to handle circulation, and transfer the Osborne network into a multi-user RCP/M-RBBS to handle multiple callers.

Gale Rhoades also uses the Drive C: memory disk in her Osborne. She uses it in the office Osborne as a cache buffer to speed up hard disk operations, and on the road with the Osborne as a "portable hard disk." Drive C: provides 384K of RAM acting as a third disk drive. The unit fits neatly in the Osborne 1 floppy disk holder and provides temporary storage (only while power is on) but faster program operation. "Drive C: speeds up our network, and really runs programs fast. It is a little high in price in my opinion, but it is really good."

Software Specifics

The three major pieces of software that run the RCP/M-RBBS are the Heavy METAL message system, the XMODEM file transfer program, and the BYE remote control program. XMODEM, based on Modem7, lets you transfer any type of CP/M file without errors in the transmission.

METAL and a program called BYE control access to the RCP/M-RBBS.

continued on page 40

Here are some sample messages, some of which may be helpful in explaining how to use this RCP/M-RBBS.

Msg #19 posted 03/15/84 by GALE RHOADES

To: ALL USERS About: ACCESS TO THE CP/M (15 lines)

[Read y/n/r/q]Y

If you want to be allowed to upload and download files from this system, you must have access to CP/M.

This access will ONLY be given to those who leave a message requesting access and listing their name, address, phone number, and (if they are a member) their FOG membership number as a comment when leaving this system. Non members will have access to the CP/M system if they leave a message but they will be restricted to user levels 0 and 1. FOG members will have access upto user level 11. Officers of AMO groups will have access upto level 12.

Gale Rhoades

Msg #157 posted 03/28/84 by GALE RHOADES

To: ALL USERS About: DIR, LUDIR, TYPE, and LTYP (15 lines)

[Read y/n/r/q]Y

Yes, I know, we had a major problem with DIR on drives E: and F:. I think though that you will find it fixed now. Remember though, FILE can be an alternative.

For those who want to know the contents of a .LBR file, use TYPE or TYPEL (they are really the same). For details on how to use, just enter TYPE<cr>. A description will appear.

For those looking for LTYPE and TYPESQ, may I suggest TYPEL. Not only does it work as LUDIR, it will also type a squeezed file (or unsqueezed file) in or out of a .LBR file. Again, enter TYPE ⊞ or TYPEL ⊞.

Gale

Msg #325 posted 04/13/84 by GALE RHOADES

To: RANDAL FISHER About: TYPEL.OBJ (14 lines)

[Read y/n/r/q]Y

Use the command:

FILE TYPEL.OBJ ⊞

to find TYPEL.OBJ. If you use the command:

SECTION LIBRARY.FOG ⊞

to go to the library area, you can use CAT.COM to look for a specific file in the FOG library. Then, knowing the disk it is on, you can go to that section and verify by checking the directory of the .LBR file. If you will give me a "for instance", I will give you the step-by-step procedure.

Gale

Msg #353 posted 04/19/84 by GALE RHOADES

To: RANDAL FISHER About: TYPEL.OBJ (31 lines)

[Reply to msg #325]

[Read y/n/r/q]Y

To find MODEM7.COM on this system:

1. Where you know which library disk it is on:

Since you don't specify a version number, I will assume that you want the one from FOG/UTL.031 which is UTL#031.LBR on this system. The first step is to go to the UTILITY.FOG section on this system with the command:

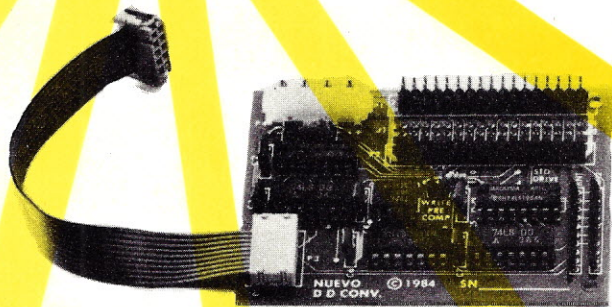
SECTION UTILITY.FOG ⊞

Now, at the prompt, enter:

TYPE UTL#031.LBR ⊞



A NUEVO DAY HAS DAWNED FOR YOUR OSBORNE ONE



THE DOUBLE DENSITY UPGRADE

- *Totally compatible with the factory version double density.
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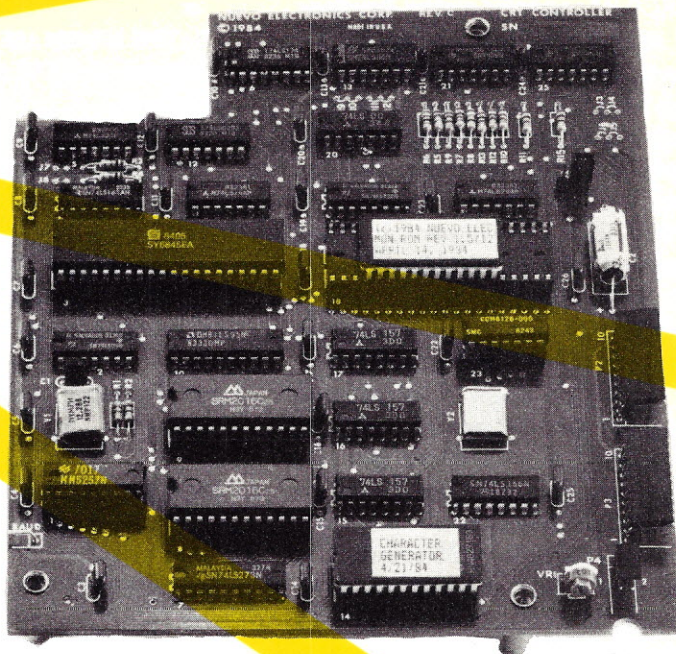
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Continued from page 38

The RCP/M operating system functions as a normal Osborne running CP/M; however, the ERA, SAVE and REN commands have been taken out to prevent unauthorized erasing, renaming files or running untested programs on the system.

BYE, originally written by Ward Christensen who is a prolific writer of public domain software, puts CP/M in a remote state capable of responding to a modem activated by a telephone call.

It took five months to break new ground and get BYE and METAL running properly on an Osborne with the Trantor hard disk. This was largely the effort of Gale, Roy Robinson and Jack Brown. The RCP/M-RBBS software, in particular the BYE program, does not yet run on an Executive, although FOG member George Pease is working on it.

BYE requires modifications to the Osborne main circuit board to run — soldering jumpers and cutting some traces. Because these modifications might void your warranty, BYE for the Osborne 1 will not be released to the public domain until it is sufficiently documented, especially with a caveat about possible voiding of a service contract or warranty.

Heavy METAL, written in Aztec C by Tim Gary and Byron McKay, also runs on the Piconet BBS of the Piconet user group. METAL starts up automatically when you call, and provides access level control as well as a password-access system and message system. A specific caller's access level can be defined as, for example, drives A through C and user areas 0 and 1, even if the system has many drives and user areas.

Messages are easy to read or create using METAL. After reading a message you can immediately respond to that message in such a way that anyone else reading the message can go right to your response. You can read all the latest messages or simply scan a summary of the message topics.

The system operator of the FOG RCP/M-RBBS #1 (in this case, Gale) posted a lot of messages for novices that tell you things about the system and about public domain programs that make them easier to use.

The METAL message system tells you the highest message number you re-

or

TYPEL UTL#031.LBR

(The two files TYPE.COM and TYPEL.COM are identical.) The directory of the .LBR file will now appear.

2. Where you do not know which library disk it is on:

The command DIR *.*\$UAODL will list all file names, in or out of .LBR files for this system. If you know a specific file name, you may replace the *.* with that filename — or any part thereof.

Use the command DIR M*.OBJ\$UAODL to locate the file. Please note that the character between the A and the D is a zero, not an 'o'.

Hope this helps. If not, leave me another message or try the CHAT line.

Gale

Msg #412 posted 05/01/84 by GERHARD BARTH

To: ALL USERS About: UPLOADING MESSAGES (31 lines)

[Read y/n/r/q]Y

I had good success with sending pre-typed messages via MDM7XX to RBBS's, but it took some experimenting. Since this may help others, I uploaded a detailed tutorial as file PRETYPE.MSG, which Gale (who suggested it) will soon make available — I am sure — for downloading.

In the meantime, here is a brief summary:

1. Use Wordstar in the N-mode to prepare message (two Returns at end). A blank line will stop the transmission unless you put at least one space in it. Remember message name (see 7 below).

2. Put Disk with message in Drive B.

3. Load your MDM-version in A. (I used MDM715 and now MDM730).

4. Set delays to 90/300 ms using command SPD (Type 9, then 3 in reply to prompt).

5. LOG B: , T FN (to capture, not the message name), then Control-E.

6. Call RBBS, enter message module 7. At line prompt 1) type Control-T, then message name

8. Answer question "time delay?" with Y(ES).

9. If you don't see "(A)bort,(C)ontinue etc" menu after transmission, hit Return.

10. L(ist) before S(ave) to check for transmission errors. If there are any, correct them and blame AT&T — not me.

Good luck and have fun! -gb-

Entering the RCP/M

The following is an excerpt from the sign-on message you receive when you leave the METAL message system to go into the RCP/M area:

Welcome to the First Osborne Group RCP/M #1

This system operates almost like the computer you are sitting at. The largest difference is that this system is much larger than most Osborne systems. It is made possible by the addition of a TRANTOR 33 megabyte hard disk subsystem.

This system operates 24 hours a day, except for maintenance. It accepts both 300 and 1200 baud calls. All callers MUST use 8 bit, no parity in order to use this system.

There are also some minor changes to stop deliberate system crashing. You will not notice most of these changes.

If at anytime you are in need of assistance, you may either type:

HELP ↵

(the ↵ symbol stands for your Return key.)

This will give you several listing for assistance.

If the sysop (SYStem OPERator) is available, you may ask for personal assistance by typing:

CHAT ↵

To see what programs are on this system, type:

FILE *.* ↵

To disconnect from this system, type:

BYE ↵

Please remember that access time on this system is one hour (60 minutes). Repeated abusers will have their access restricted.

— Gale Rhoades, sysop
First Osborne Group, System #1

[Entering CP/M]
A0>

System Commands

The following commands and utility programs are available from the RCP/M area:

DIR ← To get a directory of the software on the A drive.
DIR B: ← To get a directory of the files & programs on the B drive.
FILE *.* ← To display the system's complete catalogue.
FILE PUT.AQM ← To see if the system has PUT.AQM. Wildcards supported.
XMODEM S FILENAME.TYP ← To send a file to your system from this one.
XMODEM R FILENAME.TYP ← To send a file from your system to this one.
XMODEM RC FILENAME.TYP ← To send a file from your system to this one
 using the Osborne COMM-PAC modem.
HELP ← To enter the HELP program.
CHAT ← To talk with a system operator, if available.
TYPE ← To list a squeezed or ASCII file.
METAL ← To re-enter the message module.
USER 1 ← To log to another user area (in this case User 1).
B: ← To log to the other drive (you MUST use the colon).
SYSOP ← To leave a comment without going back into the RBBS.
XFERTIME F00.OBJ ← To find out how long it will take to XMODEM F00. OBJ.

trieved the last time you called, so that you can remain current and continue reading messages where you left off without reading old messages.

The FOG Library

The public domain library is constantly being updated and added to. It is now broken up into categories: system-specific *utilities* for a variety of systems including Osborne, CompuPro, Morrow, Kaypro, PMC MicroMate, Zorba and others, and system-generic *applications* for dBASE II, SuperCalc, MailMerge and other programs that run on all these systems. The library contains over a thousand programs, or the equivalent of about 200 Osborne single-density 5-1/4" disks.

Programs submitted to the FOG library are tested, and if there is no documentation, a group member will write the documentation before putting both the program and its documentation in the library. This qualification process is now being split up among more individual librarians in the network, but the fruits of their labors are put into the FOG library, and qualified submissions appear immediately on every FOG RCP/M-RBBS system in the network.

The monthly *FOGHORN* announces the availability of the new software, and FOG publishes the library catalog every quarter. Affiliated FOG groups receive the software for distribution to their members. All groups have equal access — out-of-state group shipments occur before local shipments to Bay Area FOG chapters, so that the entire FOG network gets the software at about the same time.

FOG already provides software for Osborne, Morrow, Kaypro, CompuPro, PMC Micromate, Zorba and other computers. FOG will try to provide public domain software for any computers used by members, as long as Gale can find a member willing to act as librarian and a collector/tester and qualifier of software for the FOG library.

FOG now ships about 2000-4000 disks a month out of the Daly City office to FOG members around the world who have no local chapters — such as mem-

bers in China, Africa, other countries, and remote places. FOG supports nearly all the disk formats. The monthly *FOGHORN* provides all the details.

Calling and Using The System

As one out of a possible 60 to over 100 people trying to call in a single day, you may have trouble getting on. However, some communications software packages, both commercial and public domain, will keep making the call automatically until you gain access.

The latest version of the public domain Modem7 program not only keeps trying the number — it also lets you “ping-pong” between two numbers: if one is busy, try the other, over and over again until you gain access. Software features like this are ideal for getting onto these busy RCP/M-RBBS systems, where callers frequently spend almost an hour downloading software (transferring software to their home computers).

Over half of the callers use 1200 baud modems for faster transmission. When you call and connect with the system's modem, you must type a few Returns to actually connect with the BYE program. To the question How many nulls do you need? that first appears, type a zero and press Return. You are then connected with the system, and you have to type your name and password to gain access. (See accompanying box showing a sample log-on and some help messages from FOG RCP/M-RBBS #1.)

Gale Rhoades, sysop of #1, wants callers to know that they can “upload” (send to the RCP/M-RBBS system) programs as long as the programs are in the public domain. As system operator she checks the bulletin board daily for misuse of the system. Also, callers can upload only to a special area where they and other callers cannot gain access. This helps to prevent someone from uploading and trying to distribute commercial or private software illegally.

Utilities are provided to help find files to download. Every user level on each drive has a name. The SECTION program lets you move directly to a named

Sections

The public domain library is divided into named sections on the disk, each corresponding to a drive/user area:

Files on this system

To find out what files are on this system, type:

DIR *.* \$UOADL ↵

at any RCP/M prompt. This program will list all files on all user levels on all drives, including the contents of all .LBR files. It takes it a few seconds between drives so be patient. If you see something interesting, you must first go to that user level and then to the correct drive.

If you wish to cancel this command, enter a Control-C (^C).

:What areas are on this system?

A new program has been added to this system. To find out how the system is divided up, type:

SECTION ? ↵

All available areas will be listed with a short description of what files will be found in each area.

This program will also assist you in moving about the system. For example, if you wish to go to the section NEWFILE.FOG, you simply enter the command:

SECTION NEWFILE.FOG ↵

If you know the drive and user level, you may prefer to use the LOG command. For example, if you wish to go to drive b:, user 10, the command is:

LOG USER.B10 ↵

Note that the first character of the extension is the drive indicator and the last two characters are the user number. Be aware that if you do not enter two characters for the user level, the program will give you an error message. Thus, to move to drive a:, user 2, the command is:

LOG USER.A02 ↵

Since sections can be easily moved around the system, the SECTION command is generally more reliable since it will always know where I have moved a section to.

A0>section ? ↵

Available sections are:

NOTICES.FOG...Messages and HELP files	LIBRARY.FOG...-FOG/LIB library disks
PUBLIC.002....Open to all users	UTILITY.FOG...-FOG/UTL library disks
PUBLIC.003....Open to all users	GAMES.FOG....-FOG/GAM library disks
PUBLIC.004....Open to all users	APPLIC.FOG...-FOG/APP library disks
PUBLIC.005....Floppy drive for special requests	LANGUAG.FOG...-FOG/LNG library disks
PUBLIC.006....Floppy drive for special requests	MISC.FOG.....-FOG/MIS library disks
NOVICES.FOG...Special files for the novice	HACKER.FOG....-FOG/HAK library disks
NEWFILE.FOG...Files recently uploaded	EXEC.FOG.....-FOG/EX1 library disks
MORENEW.FOG...More programs not yet in the library	
MORROW.FOG....-FOG/MMD library disks and S.I.G.	
ZORBA.FOG.....-FOG/ZOR library disks and S.I.G.	
KAYPRO.FOG....KAYPRO Special Interest Group	
LOBOMAX.FOG...LOBOMAX Special Interest Group	
AMOSPEC.FOG...Special material for A.M.O. officers	
SYSOPS.FOG....For FOG network sysops only	
UPLOAD.PUB....Public upload area	
UPLOAD.PVT....SYSOPS private upload area	

drive/user level such as NEWFILE.FOG without having to type the drive letter and the USER command.

The TYPE and DIR built-in commands are replaced by TYPE and DIR utilities. TYPE, for example, will display a text file, or display a squeezed text file, or give you a list of the files stored in a library file, or display a file that is stored in a library file.

For the novice user there are help messages. Simply type HELP ⊞ for a menu of help topics. Or you ask for help with a specific command — HELP XMODEM ⊞ displays a help message describing how to use the XMODEM program to upload or download a file. The METAL message system also provides help messages for its commands.

If you're having trouble, try the CHAT program to have a chat with the system operator. The CHAT program beeps the system operator's keyboard, and if the "sysop" is there and in a mood to answer, you can "talk" directly by typing at the keyboard. If the "sysop" doesn't answer, you can leave a special message with the questions you have. A "chat" function is also provided in the METAL message system.

System operators are often very helpful and will walk you through operations with programs like XMODEM or the METAL message system. The "sysop" can take over and type the commands for you while you watch, and also type quick messages to you.

Questions left on the bulletin board are usually answered by other callers or by the system operators. "Sysops" are not paid for their time and they donate their own equipment to run this system, largely because they want to help people use computers.

Access Information

Here are the phone numbers for the four FOG RCP/M-RBBS systems:

- #1 (415) 755-2030. Daly City, CA (near San Francisco), has the entire FOG library (for novices). 300 or 1200 baud.

- #2 (604) 596-0314. Vancouver, BC (advanced). 300 or 1200 baud

- #3 (415) 992-8542. Daly City, CA (advanced). 300 or 1200 baud

- #4 (415) 591-6259. Belmont, CA (specialized: technical help, new technology topics). 1200 baud only.

There are also some bulletin board systems that use the METAL message system but are not FOG affiliated, nor do they carry the FOG public domain library:

PICONET — 415-965-4097 300 and 1200 baud

POTPPOURRI — 408-378-7474 300 and 1200 baud

SERVU — 408-238-9621 300 and 1200 baud

For one in your area, check the accompanying list of worldwide RCP/M systems.

How to Join FOG

Dues in FOG are \$24.00 per year. This entitles each member to a copy of the *FOGHORN* each month (mailed by non profit bulk mail to US addresses) as well as access to the library and further areas of the bulletin board systems.

In addition to the membership fee, the following sums must be added for other delivery — Canada & Mexico (or US 1st class): add \$6.00; Central or South America, Caribbean, and Europe: add \$12.00; Asia, Africa, Far East: add \$15.00.

Mail your membership fees, or write for more information, to **First Osborne Group (FOG), P. O. Box 3474, Daly City, CA 94015-0474**. The "voice" phone is: (415) 755-4140.

Gale wants all potential FOG members to note that all the information they need is in every monthly *FOGHORN*, and a sample issue will be sent to you if you request one.

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User's Guide, Feb/Mar, 84

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Dr. Dobb's Journal, Feb 84

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"...sorts on zip code even if part of a "city, state, zip" field."

Microsystems, Aug 83

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Letters

Continued from page 4

Considerable changes were made to Drive C's hardware design and the software was enhanced dramatically before we went into production. Mr. Kranz may have made some valid criticisms of the unit he tested, but all of them are out and irrelevant since NONE apply to ANY production Drive C:!

All production units are faster running, faster loading, more reliable, and easier to use than the prototype he tested.

We believe there is no more useful or valuable peripheral you can buy for your Osborne computer than Drive C:. It's inexpensive and makes your machine virtually immune to obsolescence for years to come.

Robert B. Marsh
Drive C:
Emeryville, CA

(It has always been the policy of Portable Companion to not edit or censor in any way the articles reprinted from user group publications, as per an agreement with several user groups. We invite comment on all reviews and articles, including those that are reprinted from the user group publications — editors.)

Meeting New Misunderstandings

I don't know about all Ozzie users but this one has never bought a stereo or auto without either knowing how to use it, knowing who to call to find out, or having a manual adequate to fill the voids before taking it home. I don't know how much it would have cost to provide adequate product support for the Ozzies sold to date. I also don't know where the money I paid for my O1 is resting at this moment. I do know that if any money I may spend for this most useful item (my subscription to Portable Companion) is to go to support the perpetuation of misunderstanding a market as evidenced in "Meeting New Standards" in the April/May '84 issue, you may remove

that feature and reduce the price of the magazine proportionately and get no objections from me.

Phil Clark
Houston, TX

Around the World

Recently, a trip was concluded that involved stop-overs in Norway, Scotland, The Netherlands, France, Italy, Greece, Dubai (U.A.E.), Hong Kong, Bangkok, Malaysia, Singapore, Indonesia, Australia, New Zealand, with a return to Dallas, Texas. You might say "what's so unusual about that!" What might be different is that my traveling companion was an Osborne Executive portable computer.

The purpose of my journey was, of course, business. The business was to conduct seminars illustrating the application of software programs developed by Dr. Phil Callas of the Colorado School of Mines on the Osborne computer for the oil and gas drilling companies overseas.

When you spend approximately three months with such a travelling companion, you get to know it pretty well. For example, in the evenings in the hotel room, it kept me company as we did reports, wrote letters, and did graphics with Osboard. All of this work was, of course, saved to file diskettes. It sure was nice to hand those diskettes to my secretary on returning to the office and have three months work put on my desk in thirty minutes!

In visiting many countries, the Osborne was exposed to varying voltages and current surges. It served me well and always booted up when needed. A taxi driver slipped on some ice in Norway in January and dropped the Osborne. That was frightening as Norway was the first stop on the journey, but the "rugged" Osborne booted and the show went on as scheduled.

It was amazing how many folks along the way didn't know what the Osborne computer was or what it was used for. Most people in airports or hotels thought it was a sewing machine. Anyway, the trusty old briefcase and papers are permanently "on the shelf" as the "exec"

and the writer are going to travel together for a long time to come!

Jack Enan
Dallas, TX

Baudot Solution

Re: page 12, April/May issue "Q and A" about Baudot coding — We know of two possible solutions to the problem of how to communicate with people who have 5-level Baudot machines. One is to subscribe to a common carrier which translates 7-level ASCII to and from Baudot on the fly, allowing conversion. ITT costs \$30.00/month for access, TRT is \$20.00 monthly. These may not be available away from terminating cities as the service originally was only for international telex traffic.

The other solution is a software converter. The CP/M Users Group (CPMUG) Disk #41 (from CACHE for Ham radio) contains several such programs. There are source code ".ASM" files and could be appended to a modem program. We supply copies of that disk in Osborne disk formats: \$10.00 for two sides double-density or Executive formats, \$12.00 for three sides single density format.

We maintain a library of about 500 sides in Osborne double-density format, consisting of CPMUG 1-92, SIG/M 1-172, NYOUG 1/10, and 100 FOG. SIG/M and CPMUG require 2 sides double-density 5-1/4" for each volume number. FOG and NYOUG are 90K each, so fit 2 per side.

Thanks for reviving the *Companion*.

Don Johnson
The Public Domain Software
Copying Company, NYC, NY

Good News, Bad Labels

Oh, there is "Good News" and "Bad News." First the Good News! The *Portable Companion* has returned. Let there be loud huzzahs! Now for the Bad News: our previous subscriptions will not be honored — instead, regardless of how long we had until expiration, we get two "freebie" copies of the new magazine.

More possible bad news for [former] subscribers. As I took my magazine from the mail box, the label fell off and fluttered gently to the ground. Lack of stickum, I warrant. I wonder how many are at the bottom of mail pouches? I have enclosed mine so you can check it against what your machine is now doing.

You DID publish a September, 1983 issue. As I did not get it (same label machine?) and as the "no free lunch" sign has been posted by Brown and heirs, I assume I have to pay for that *in addition to the new subscription*. If not, I will split the difference with you and you can spend the rest on glue for the labels. Your choice.

Robert F. Arney
Blaine, WA

The label situation has to do with the type of glue used by the mailing house. OCC is trying to correct the problem. Sorry for the inconvenience.

By the way, there is no such thing as a free lunch, and bankruptcy is final. Under the terms, OCC can't honor any financial obligations until the legal

complications are worked out. Bankruptcy law forbids it. Honoring subscriptions without honoring other debts could be against the law. We'll have a legal expert report on this and other such topics in a future issue.

Unhappy

I'm happy to see that the *Portable Companion* is back and sorry to learn that the cover price is now \$5.00. That appears to me to be a rather hefty increase over the pre-bankruptcy cover price of \$2.95. It's nice to know that there is a small savings of \$5.00 to those who choose to subscribe for six issues. However, before I consider whether a paid subscription is truly worthwhile, the following questions come to mind.

1) My previous financial transaction with the *Portable Companion* [actually OCC] was a \$37.95 check to renew my subscription for 24 issues beginning with the September 1983 issue. Since September was the month of [OCC] bankruptcy, my investment turned out to be

less than prudent. If the Osborne reorganization plan fails will it take my new subscription and the *Portable Companion* with it?

2) Osborne has indicated that they no longer plan to manufacture the Osborne O-1, the machine I own. To what extent can I expect that the *Portable Companion* will be devoting its coverage to the new products (whatever they may be), which could possibly be of little interest to myself and other O-1 owners. In other words, if I choose to once again subscribe, is there any assurance you can offer as to your commitment that your news product will truly be useable to myself as an O-1 owner?

3) The April/May 1984 issue arrived by mail without charge, for which I am most grateful. But, had I purchased the issue from the news stand I would have questioned the content of the 60 pages in terms of the cover price. I noticed your commentary under "Start Up" which outlines your commitment to continue certain columns from the past. That still leaves the question that for \$5.00, "where's the beef?" Or, are we



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CP/M is a registered trademark of Digital Research.

once again benefiting from Adam Osborne's famous "aggressive pricing" philosophy ("aggressive pricing" was the euphemism used to justify the original \$2495 retail price of the Osborne Executive).

So, dear Editor, the magazine has returned with less at greater cost and under the cloud of parental bankruptcy. I've supported Osborne and the magazine in the past, but what should I do now?

Bond R. Shands Jr.
San Francisco, CA

Consider the alternative: no support from a newly reconstituted Osborne, and no magazine. Readers who find the magazine useful must be willing to risk their dollars if they want to see such a magazine survive. Because this is a special interest publication, it depends a great deal on subscriber and renewal income to survive.

The magazine's future depends on support for Osborne Computer Corp. (OCC). As independent editors with no former employment or contractual ties with OCC or stock in OCC, and as long-time Osborne 1 owners and members of FOG, we heartily support the reorganization efforts.

Portable Companion is managed by the reorganization team, not the former upper management of OCC. Adam Osborne, who has earned our esteem for his many accomplishments and words and wisdom, provided an article for the revived Portable Companion, but is not setting its price.

This magazine is not offered on newsstands at this time, and its high cover price encourages people to subscribe, which at this time is the most economical way to distribute the magazine. Many creditors of OCC would agree with this approach.

We are committed to covering the Osborne 1 as well as the Executive and any new OCC products that come with the reorganization. We are long-time Osborne 1 users (we had serial number 00010 on loan before we bought our first blue-case O1), we are also members of the local FOG user group.

We mentioned the previous columns because we wanted Portable Companion readers to know that those columns would continue. Believe us, we are plan-



ning additional material. The "beef" is appearing in this and future issues. Watch for it.

Non-standard Power Supply

I was glad to see the *Portable Companion* start up again. More power to you. I was also amused to see that Adam Osborne still has a column. Though his name was not attached to it the pompous style is unmistakable. (*Adam's name was left off by our mistake, not by intention — editors*).

I see he still doesn't hesitate to rave about standards and how he has avidly supported them. I won't bother to list all the non-standard things about the O1, that is old news. I'll just mention the most absurd one. Many (most?) of the early O1s had power supplies which were set so low that the voltage at the power supply pins of many of the integrated circuits, including the CPU, was less than 4.75 volts. Five volts + or - 5 percent (5.25 to 4.75 volts) is the industry standard power supply voltage for LSTTL ICs and the Z-80 CPU. This standard is so important that Intersil makes an IC which can be used to watch the voltage and suspend operation to project data when it is exceeded.

I have been into many other computers and have never seen this under-voltage condition in other computers unless the power supply was damaged. New tan case O1s were shipped that way. Mine was. The replacement power supply installed by my local dealer was identical to the original bad one. The one shipped.

When the dealer failed to obtain a

Flag and listing that produced it, from Richard O. Worth, Redwood City, CA.

meaningful response from OCC I wrote to OCC with no better results... After a considerable delay I received, through the dealer, another power supply which was, unbelievably, identical to the other two.

I have since repaired several tan O1s with the same stupid problem. I believe that the power supplies were set that way intentionally. Lower power supply voltages reduce heat dissipation and the tan case obviously had too little ventilation. I suppose it is too much to expect OCC to admit to such a tactic.

All this is water under the bridge but it is just one more reason that it is absurd for Adam Osborne to pontificate about standards...

Enough of the fountainhead. Pull its plug. Crate it up and send it off to Madison Avenue. It'll be a smash!

Art Kennedy
Springfield, OR

One For Independence Day

So nice to have the *Portable Companion* again. Enjoyed the graphics article. Hope you will now expand on it. Enclosed is a program which I wrote to display a flag. Seems to work fine on the screen, but can't get a printout with proper graphic stripes. Thought maybe you could help. Sure hope more articles of this type will follow.

Richard Worth
Redwood City, CA


```

10 PRINT CHR$(26)
20 LET A=61578!
30 LET B=61644!
40 LET C=63370!
50 LET D=63436!
60 LET E=61707!
70 LET F=61771!
80 LET G=63243!
90 LET H=63179!
100 PRINT CHR$(26)
110 REM
120 T=0;V=25
130 FOR U=1 TO 5
140 GOSUB 280
150 T=T+256
160 NEXT U
170 REM
180 T=128;V=21;E=E+2
190 FOR U=1 TO 4
200 GOSUB 280
210 T=T+256
220 NEXT U
230 REM
240 GOSUB 320:REM
250 GOSUB 400:REM
260 REM
270 GOTO 490
280 FOR X=2 TO V STEP 4
290 POKE (E+X+T),42
300 NEXT X
310 RETURN
320 T=0
330 FOR X=1 TO 5
340 FOR Y=24 TO 60
350 POKE (E+Y+T),22
360 NEXT Y
370 T=T+256
380 NEXT X
390 RETURN
400 T=1280
410 FOR X=1 TO 2
420 FOR Y=0 TO 60
430 POKE (E+Y+T),22
440 NEXT Y
450 T=T+256
460 NEXT X
470 I=61578!:J=61644!
480 FOR Y=1 TO 14
490 FOR X=I TO J
500 LET Z=PEEK(X)
510 IF Z=32 THEN Z$=" "
520 IF Z=22 THEN Z$=CHR$(223)
530 IF Z=42 THEN Z$="*"
540 LPRINT Z$;
550 NEXT X
560 LET I=I+128;LET J=J+128
570 LPRINT
580 NEXT Y
590 END

```

EVEN STARS

ODD STARS

START OF STRIPES

SHORT STRIPES

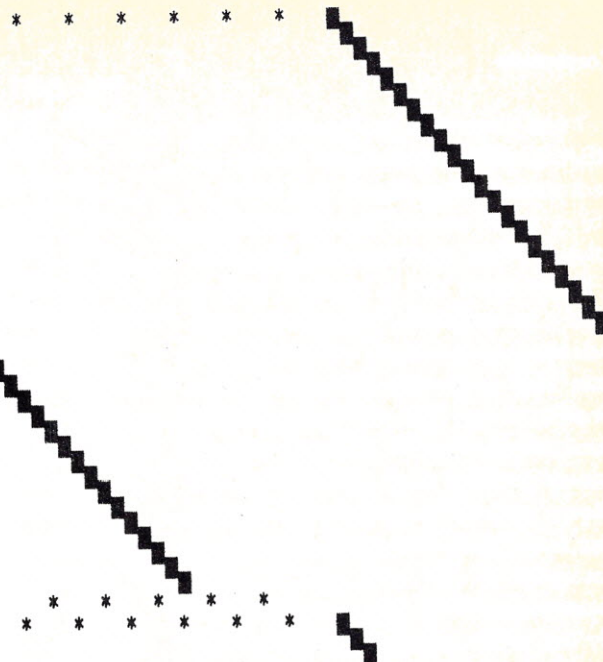
LONG STRIPES

STARS

```

470 I=61578!:J=61644!
480 FOR Y=1 TO 14
490 FOR X=I TO J
500 LET Z=PEEK(X)
510 IF Z=32 THEN Z$=" "
520 IF Z=22 THEN Z$=CHR$(223)
530 IF Z=42 THEN Z$="*"
535 IF Z=22 THEN LPRINT CHR$(27);"E";CHR$(27);"G";
540 LPRINT Z$;
545 IF Z=22 THEN LPRINT CHR$(27);"H";
550 NEXT X
560 LET I=I+128;LET J=J+128
570 LPRINT
580 NEXT Y
590 END

```



Correction

I was pleased to see my letter about MBASIC FIELD statements in your recent start-up issue (April/May 1984, p. 16) — until I read it. Two aspects of the solution I sent, one illustrating the use of a buffer mask and a for/next loop to build a record and a longer program illustrating how to write records longer than 255 characters, have been combined in a way that won't work for the same reasons that Mr. Cuevas's original answer wouldn't work: MBASIC will not allow a variable longer than 255 characters in a FIELD statement. As the last paragraph in my letter said, to write records longer than that, you must multiply the buffer masks and nest for/next loops.

The following listing:

```
500 FOR X=0 TO 49
510 FIELD #1, X*10 AS MASK$, 10 AS BNUM$
520 LSET BNUM$=NUM$
530 NEXT X
```

Should be replaced by:

```
500 FOR I=0 TO 1
510 FOR X=0 TO 24
520 FIELD#1, I*250 AS MASK1$, X*10 AS
MASK2$, 10 AS BNUM#
530 LSET BNUM$=NUM$
540 NEXT X
550 NEXT I
```

I have enclosed a copy of the program I originally sent Mr. Cuevas. As you can see, this second sequence is the one I used there.

Catherine Wildermuth
Austin, TX

Counting Words Using WordStar

In your April/May issue you asked if any readers had a solution for being able to count words in a document using WordStar, and I have one, although a bit crude. First, after you've saved your document (Control-KS), reset the right margin to 3 (Control-OR3), then continuously reform the document (Control-QQ Control-B1). When this operation is

```
90 OUT 0,65
100 RANDOMIZE
110 PRINT CHR$(26)
120 FOR S=49152! TO 49231!
130 POKE S,22
140 NEXT S
150 FOR S=49359! TO 52175! STEP 128:POKE S,22
160 NEXT S
170 FOR S=52174! TO 52096! STEP -1
180 POKE S,22
190 NEXT S
200 FOR S=51968! TO 49280! STEP -128
210 POKE S,22
220 NEXT S
250 A=50600!
260 FOR LOOP=1 TO 1000
280 F=E
290 E=D
300 D=C
310 C=B
320 B=A
330 AIM=INT(RND*5)
340 IF AIM=1 THEN A=A-128
350 IF AIM=2 THEN A=A+1
360 IF AIM=3 THEN A=A+128
370 IF AIM=4 THEN A=A-1
380 IF A<49152! OR A>52254! THEN GOTO 410
390 IF PEEK (A)=22 THEN GOTO 410
400 GOTO 430
410 A=B:GOTO 330
430 POKE A,127
440 POKE B,127
450 POKE C,127
460 POKE D,127
470 POKE E,127
480 POKE F,42
490 NEXT LOOP
500 OUT 0,1
```

Listing for animated graphics from Tom Ingram, Houston TX, with modifications for running on the Executive.

finished, you will see the page and line count at the top, and from this, it is simple to calculate the number of words since each line contains exactly one word. For example, if it says Page 33, line 24, you have 32 complete pages (of 55 lines each) plus 24 lines from the last page, or 1784 words.

Don't forget to reset the right margin, and quit without saving (Control-KQ).

Bob Ulmas
Yonkers, NY

Easy Graphics For Executives

The program in the article, "Easy Animated Graphics" by Edward Denison (April/May 1984 issue, p. 39) may be rather easily altered to fit the needs of Executive owners. Two lines need to be added and a few lines need alteration to


```

10 '
20 ' PROBLEM: HOW TO ALLOW BUFFER SPACE FOR A LARGE ARRAY WHEN WRITING TO RANDOM FILES
30 ' PROBLEM: NO SINGLE FIELD IN A FIELD STATEMENT CAN BE > 255
50 DIM NUM$(49)
60 DATA "0","1","2","3","4","5","6","7","8","9","10","11","12","13","14","15"
70 DATA "16","17","18","19","20","21","22","23","24","25","26","27","28","29"
80 DATA "30","31","32","33","34","35","36","37","38","39","40","41","42","43"
90 DATA "44","45","46","47","48","49"
100 '
110 ' FIRST, THE FILE MUST BE OPENED FOR THE SIZE OF THE BUFFER NEEDED
120 '
130 OPEN "R",1,"TESTFILE",500
140 '
150 ' TO READ IN THE ARRAY, USE A DUMMY FIELD THAT MASKS SUCCESSIVE PARTS OF THE RECORD,
160 ' REMEMBERING THAT IF THE RECORD >255, MORE THAN ONE DUMMY FIELD WILL BE NECESSARY.
170 '
180 FOR J=1 TO 1 'RECORD NUMBER
190   FOR K=0 TO 1 'MASK FIRST HALF OF RECORD WHEN K=1
200     FOR I=0 TO 24 'EXPANDING MASK
210       FIELD 1, K*250 AS MASK1$, I*10 AS MASK2$, 10 AS BNUM$
220       READ NUM$
230       LSET BNUM$=NUM$ 'INSERT DATA INTO THE BUFFER, 10 CHARACTERS AT A TIME
240       NEXT I 'INSERT FIELDS 1-25
250     NEXT K 'INSERT FIELDS 26-50
260     PUT 1,J 'WRITE THE TOTAL BUFFER TO DISK AS ONE RECORD
270 NEXT J
280 '
290 ' TO READ OUT THE ARRAY, JUST REVERSE THE PROCEDURE ABOVE
300 '
310 FOR J=1 TO 1
315 GET 1,J
320   FOR K=0 TO 1
330     FOR I=0 TO 24
340       FIELD 1, K*250 AS MASK1$, I*10 AS MASK2$, 10 AS BNUM$ 'EXTRACT 10 CHARACTERS ON EACH PASS
350       IF K=0 THEN NUM$(I)=BNUM$ ELSE NUM$(25+I)=BNUM$
360     NEXT I
370   NEXT K
380 NEXT J
390 NEXT J
400 CLOSE
410 '
420 ' TO TEST THE RESULTS
430 '
440 FOR I=0 TO 49
450 LPRINT NUM$(I);
460 NEXT I
470 STOP

```

0	1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	18	19
20	21	22	23	24	25	26	27	28	29
30	31	32	33	34	35	36	37	38	39
40	41	42	43	44	45	46	47	48	49

*Listing showing MBASIC FIELD statements,
from Catherine Wildermuth, Austin TX.*

adapt it to the Executive. Add the following lines:

```
90 OUT 0,65
```

This line enables bank 7 for screen access.

```
500 OUT 0,1
```

This line returns the computer to normal.

The following lines need to be altered due to the different location of the screen in the Executive:

```
120 FOR S=49152! TO 49231!  
150 FOR S=49359! TO 52175! STEP 128  
170 FOR S=52174! TO 52096! STEP -1  
200 FOR S=51968! TO 49280! STEP -128  
250 A=50600!  
380 IF A<49152! OR A>52175! THEN GOTO  
410
```

By using 22 in place of 150 in lines 130, 150, 180, 210 and 390 I was able to get the boundary to be displayed as the author designed it. I am still not sure why the 150 does not work.

I would appreciate it if other readers would share similar information about the Executive.

Tom Ingram
Houston, TX

WordStar 3.30 Hint

Owners of the WordStar 3.30 update may find this hint to be of value. It concerns that pesky Insert On label, that never used to appear on the 52 column screen of the Osborne.

The problem is that version 3.30 of WordStar has a new install program, which doesn't allow one to patch specific addresses. The old install program is incompatible with the new WordStar; and to further complicate matters, the addresses are different.

The solution: DDT to the rescue! Just place DDT in Drive A, and WS.COM in drive B. I would recommend that one use the new install program to delimit whatever other parameters they wish changed prior to this patch.

1. Type DDT B:WS.COM

2. Type S0233, and you should be staring at a number 50. Type in 4F, and hit Return (shown here as ↵).

3. Type a period, and when the prompt occurs, hit a Control-C.

4. Follow with Save 69 B:ws.com, and be rewarded with seeing at the upper right corner of your 52 column screen the status of the Insert On function at all times.

Incidentally, best wishes for a successful reorganization. Glad to see you also revived the *Portable Companion*, which is a top-notch publication. Knock 'em dead now, and regain your rightful position as one of the industry leaders!

David Niemira
Bloomsburg, PA

Encouraging Words

Here's a true story of how my Osborne increased my salary:

After three unsuccessful months of trying to illustrate sales and expense trends to my superiors with traditional spreadsheet reports, I was ready to throw in the towel.

Then, at the West Coast Computer Faire, I purchased OSGRAPH Plotting and Graphing Software from DG/Systems. Immediately, I was able to create explicit bar and pie graphs further illustrating our company's sales and expense trends.

As a result, I was promoted with a salary increase for my "insight" into our company's operating future. The OSGRAPH software portrayed our financial picture and its unmistakable trends.

Thanks DG/Systems!

Shaun Ralston
San Francisco, CA

I'm sitting here in awe as I look at my new *Portable Companion*! This magazine, more than anything else, caused me to enjoy my Osborne 1! It also sold many Osborne computers to my friends and acquaintances.

I kept meaning to write you to encourage the continuance of the *Portable Companion* but I didn't. Maybe I just felt it would sound like rubbing salt into the wound, and I didn't want my suggestion

to come out that way. It's just that I've always enjoyed the magazine.

I'm not sure if I'm missing any issues, so if you could list in your next issue a complete list of issues (magazine number in relation to volume number), it would be much easier for us to order missing issues.

As far as Chapter 11 and OCC, after Chapter 11 was filed I Purchased a second Osborne for my wife to use at her work. My secretary bought her own Osborne. The fellow next to me is trying to buy an Osborne now, if he can find one. Why? Simply because the Osborne 1 is an excellent computer at an affordable price. It's reliable and comes with the best software packages available. It's an excellent machine!

I believe in the Osborne computer. I would like to back up my belief by buying stock in the company when it becomes available. Perhaps we Osborne owners should be given a chance to support the company. Right?

Anyway, congratulations (thanks) again for restarting the *Portable Companion*. You've made my day! Good luck and I'll be sure to get new subscribers for you!

Dennis Stovall
Anchorage, AK

I admire your *User's Guide* magazine and am glad to see you've taken on *Portable Companion*.

There is a problem: the labels for this publication have a bad track record. As you can see, mine came sans label. Good luck and the good efforts of the post-office folks here in Spokane found one for me.

The *Portable Companion* won't fly without labels!

Best of luck.

R. Paul Kropp, Jr.
Spokane, WA

On Support

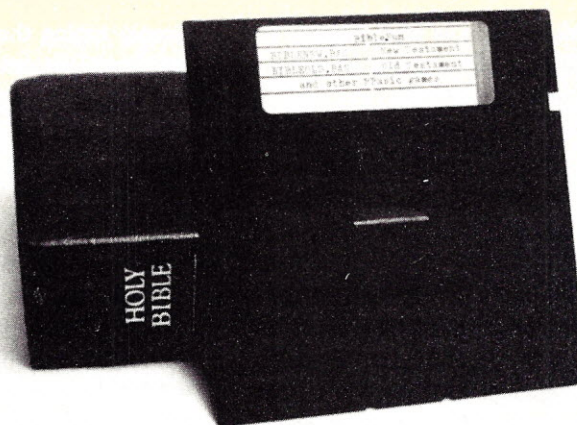
I was delighted to receive today the April/May edition of *Portable Companion*, and to know that you are resuming publication. I am enclosing a check to continue my interrupted subscription.

I was less happy to encounter Adam Osborne's article. Osborne feels it is un-

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reasonable for microcomputer purchasers to expect any support from manufacturers, and asks whether the purchasers of stereo equipment make similar demands.

I own an expensive stereo set which includes components from Sony, Akai, Pioneer, Dual and Radio Shack. Each of these components works as it was advertised to work. Each came with legible and complete directions. When anything has gone wrong with the set, I have been able to take it back to the store where I bought it, and where I was able to buy inexpensive service contracts covering the equipment.

When the microcomputer industry can make any or all of the above claims, there may indeed be no need for support from manufacturers. As long, however, as equipment is sold before it is in running order, as long as documentation is available only in partial translations from the choctaw, and as long as computer stores are staffed by salespersons who have trouble counting their own fingers, and who have no memory what-

ever regarding any piece of equipment they sold more than 15 minutes previously, the end user may well feel that additional support is not only necessary, but that he has a right to demand it.

When Adam Osborne shows up at my door with UCSD P-systems for my two double-density eighty-column Osborne computers, I'll be prepared to listen to him. Until then, I would much rather read columns by people who are attempting to put the Osborne company back together, rather than by someone whose loud-mouthed irresponsibility seems to have had so much to do with taking it apart.

William Dickey
San Francisco, CA

In your April/May issue of *Portable Companion* I was chagrined to see the same indifferent attitude toward user support as in my opinion, was the main reason for the downfall of Osborne in the first place.

When I purchased my Osborne and related equipment I had never even

looked at a computer. Later I realized that the name of the game is "tell them anything but get their money." When my dealer told me, "I don't know how to help you, I do not use it, read the book," I realized what I had purchased. When each dealer of Osborne in Salt Lake City denied the knowledge to help me answer what turned out to be simple questions I felt like an abandoned child in the middle of the desert.

After several months of studying all the books, learning what I could without help I finally resorted to calling Osborne in California. They were too busy to answer until I began making person to person calls and finally the girl gave me one word over the phone which made my program run. Think of the cost for such a simple thing...

Consider the automobile industry and the support given to buyers. A smart operator should realize that the American buyer is accustomed to such. Then to top it all off some intellectual discourses on page 8 of the April issue as to reasons why dealers of the future will not give

support. My opinion is that dealers of that ilk will not sell as many American suckers as he thinks he will.

Wayne D. Handy
Salt Lake City, UT

A Graphics Fix

Greeting and WELCOME BACK!!

Being a part time instructor at a local community college, where we have 10 Osborne 1's and an Executive, at least I have had someone to share my trials and tribulations with over the last six months. But believe me, when I found the *Portable Companion* in the mailbox this weekend, it was immediately read from cover to cover and I see the same high content of information has been maintained.

In reading the article by Edward Denison, "Easy Animated Graphics" (April/May 1984), I noticed that he uses the "graphic on/off" escape sequence. In my experience with poking graphics characters directly to video memory, there is no need to do this. Poking the proper ASCII code for the character wanted produces the characters on the screen. Example:

```
POKE memloc, charcode
```

Where `memloc` is between 61440 and 65535 inclusive and `charcode` is between 0 and 31, inclusive. This would save execution time as the `PRINT` command and `CHR$` function are very time consuming. Also, disabling the tab function, using `POKE 16750, 195`, is not necessary to access graphics character 9 using this technique. I am using ROM 1.4 and CBIOS Vers. 1.44, and would like any feedback on this approach using other ROM and CBIOS versions.

Thanks so much and stay away from the "black holes" from now on!

Don Bossung
Lincoln, NE

I was rather surprised to see Edward Denison ("Easy Animated Graphics," April/May 1984) tell us that we have to enter the graphics mode in order to poke a graphics character from the standard graphics set (ASCII numbers 0-31). This is not true, at least not on my Osborne 1.

Simply typing the following line (modified from Denison's example) will result in a little ball appearing in the right-middle part of the screen:

```
POKE 63006, 13
```

All 31 graphics symbols can be directly poked to any location in the screen memory, and mixed with alphanumeric characters, without invoking the graphics mode. This is easy and does not result in any of the complications mentioned by Denison. My supercolor program, published in *BYTE* magazine (December 1983), employs such direct poking for creating complex graphic/alphanumeric displays.

Frederick B. Essig
University of S. Florida
Tampa, FL

Faith

Imagine my surprise to actually receive a copy of the *Portable Companion*. I am sympathetic with the trials you must have endured in the wake of the much beleaguered OCC, but my own situation has also been more damaged than most.

I was an early, and still proud, owner and constant user of a tan case O-1 (serial # A00277), having ordered from an OCC dealer on faith and Adam Osborne's personality after a Winter, 1981 show. Since it was my first computer, I expected to rely heavily on the dealer. He anticipated OCC by promptly going bankrupt. As an orphan, OCC apparently did not have me on all lists. From *BYTE* I learned that later purchasers were getting what I had paid for. Updates and improvements were something I read about. When the offer

of a free introductory issue of the *Companion* was offered, I jumped at it; no response. Many months later I was offered a subscription for \$25.00. I responded, you (they) didn't. Without any dealer support or insider information I took a flyer and purchased Dual Density, Screen-Pac, Comm-Pac, Power-Pac and writer's tools, late in 1982. These were all duly supplied, although not supported when the company went Chapter 11. My situation was further aggravated by a serious MV accident in 1981 that has left me totally disabled and on crutches.

I have nothing but respect for the original concept and implementation of the machine, but as an orphan owner with no other computer experience I have had many trying moments. In spite of all this, a tribute to the hardware and software supplied, I have made constant use of the O-1 and have become quite adept at WordStar and SuperCalc and less so with MBASIC. With no outside contacts, I have made no use of programmed keys, Pearl or modem. I have sorely missed the service and support I paid for, especially since my mobility is limited.

Now comes the pitch. Since you (or someone) has held my \$25.00 all this time, and deprived me of any other guidance and comfort, I would appreciate it if it could be applied to those back issues that would be helpful to me in my present state of partial expertise (Have you (they) really managed to keep me from getting 11 prior issues?). On the basis of your positive response, and the apparently high quality of the publication, I will be glad to continue to subscribe.

Harold Gilbert
Hoboken, NJ

The Portable Companion Is Back!

"Thanks for all your help. I read the magazine front to back... even the advertising is helpful."

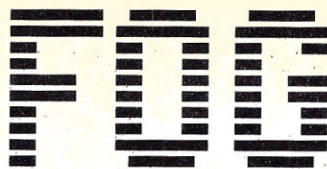
— Karen Dorcas

"I must say that this new magazine is the greatest thing that happened in my computing life since I bought my Osborne 1."

— Steven B. Henry

"I just discovered your fantastically excellent magazine. I read it through twice, slept with it for three days, puree'd it in the blender and injected it into a major vein. Outstanding!"

— Rick Stanton



The **FIRST OSBORNE GROUP (FOG)** has been formed as a User's Group for persons using or interested in portable computers and/or the CP/M disk operating system with related software. In May of 1984, there was nearly 12,000 members from around the world. Most attend local group meetings at over 300 locations.

Computer systems owned or used by members include the Osborne 1 (single and double density), the Osborne Executive 1, all models of the Morrow MicroDecision, the Zorba, all models of the KayPro, several MicroMates, and many more. Special interest groups organized to augment a network of local group meetings include dBase II, Ham radio operators, Personal Pearl.

FOG was started in October of 1981 by a small band of early buyers of the Osborne 1. The primary purpose was to organize a library of public domain software to run on the Osborne 1. A newsletter was quickly started to act as a focal point for the group's activities. The large number of excellent contributions to both the library and the newsletter has produced a library of 200 disks (as of April, 1984) and a nicely typeset (56 or more pages) monthly publication. All back issues of the **FOGHORN** are available for a nominal fee which includes shipping in the U.S. Contributions are currently being solicited for bulletin board systems in addition to the three currently in operation. All systems accept both 300 baud and 1200 baud. Phone numbers for existing systems are:

System #1 — Daly City, CA	(415) 755-2030
System #2 — Vancouver, BC	(604) 596-0314
System #3 — Daly City, CA	(415) 992-8542

While the meetings are organized on a local basis, over 100 of these local groups have joined the FOG network, thus increasing the sharing of information, tips, problems and so on. Those local groups which opt to formally join the FOG network receive a portion of local member dues to assist with the cost of maintaining a local copy of the disk library.

The FOG library is currently maintained on the Osborne 1 single density format but separate libraries are being established for the other computer formats. The library files are carefully screened and divided into category types (utilities, games, applications, and computer languages are the four major categories). Programs which contain run or other errors are put into the hacker section so interested members can fix them and resubmit for inclusion in the correct section. Items which do not fit into one of these categories are in the miscellaneous section. A catalog and descriptions of all the discs is maintained in the library section.

Dues in FOG are \$24.00 per year. This entitles each member to a copy of the **FOGHORN** each month as well as access to the disk library. Local group meetings are open to the public without charge although most restrict access to the library to the membership. The FOG library contains only public domain software. Piracy (the copying of proprietary software) is strongly condemned.

In the United States, the **FOGHORN** is normally mailed by non-profit bulk mail. (FOG is a corporation in the state of California and has obtained its non-profit, tax exempt status from both the state and federal governments.) For those members who live out of the country or who prefer first class delivery of their **FOGHORN**, additional postage must be added to the annual dues. See the chart below for details.

If you are interested in joining a self-help organization to increase your knowledge and the use of your computer, use the application below (or a copy of it). Generally, memberships received at the FOG office prior to the 15th of the month are entered in time to receive the next month's **FOGHORN**.

If you know of a local group which might be interested in joining the FOG network, please send all details (meeting dates and places, officers, and how interested local computer owners can join). We will send you an information packet on becoming an Affiliated Member Organization.

For your records, the address of FOG is P. O. Box 3474, Daly City, CA, 94015-0474. Please allow at least two months for the arrival of your first **FOGHORN** since bulk mail can take as much as nine weeks. (The post office says that it should only take about three week for non-profit bulk mail but some members on the East Coast have experienced longer delays.) A membership card will be processed within a week of the receipt of your dues.

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CITY: _____
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COMPUTER TYPE? _____
MODEM TYPE? _____ PRINTER TYPE? _____
INTERESTS? _____

Send this completed application **AND** your payment to:

**Be sure to include any required postage surcharge.
Your membership card will be sent by 1st class mail.**

FIRST OSBORNE GROUP
P. O. Box 3474
Daly City, CA 94015-0474
United States of America
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Back Issues of The Portable Companion!

August/September 1982:

Reach Out and Touch Another Computer • Why Can't Computers Be Fun • The Colorful Strobe Plotter • Inside Your Osborne 1 • Draw Cards Using MBASIC™ • Harvard Bans the Osborne 1 • Inside/Outside Osborne 1 • Mailing Labels with dBASE II™ • Monkey Puzzler Returns •

October/November 1982:

Automatic Line Numbering • I/O, I/O, It's Off to Work We Go • Where Did All the Memory Go? • Two-and-a-Half Utilities for dBASE II • Random Tracks • Connecting the Diablo 630 Printer • A Primer on Hex and ASCII •

December 1982/January 1983:

The Osborne Modem • Information Networks • A) from Afar • On a Clear Day You Can See Siberia • Basic Screen Dump • Using the Micro Link • I/O, I/O, It's Off to Work We Go pt. 2 • Learning the Value of CBASIC™ • Disk Snooping •

February/March 1983:

Dragons Blood and Lampblack • Sorting Notes with MailMerge™ • WordStar® for the Academic • Filling in Forms • Test Your Reaction Time • Too Hot to Handle • Tax Deductions • Double Trouble or Value? •

April/May 1983:

Portable, Transportable or Ergonomic Backache? • Syndicating with your Osborne • Duck • Practical Editing: Pt 1 • Graphics Screenwriting • Confessions of an Armchair General • Technical Tips • I/O, I/O, It's Off to Work We Go pt. 3 • Saving Your ASCII •

June 1983:

The Next Logical Step • Self-Publishing • Technical Tips • Rx: Osborne • Graphic Illustrations • Dating Your Computer • MBASIC Brain Twisters • Programming the Serial Port • Practical Editing •

July 1983:

From Video Screen to the Silver Screen • Portable Scriptwriting • Converting the TRS-80 PRINT @ Statement • Understanding the IEEE Port • Interfacing External Devices • The Computer Liked Them Best •

August 1983:

Me and My Ramblin' Osborne • Interfacing External Devices pt. 2 • An Instrument of Liberation • A Copyright Catechism • Setting Up a WordStar COMFYL • Technical Tips •

September 1983:

Playing the Market • CBASIC Made Less Difficult • Cutting Through Correspondence • Graphics Screen Dump • Random Number Generation • Logarithms and Antilogarithms •

October 1983:

Thar's Gold in Them Thar Hills • Automate Your Correspondence • Printing Custom Loan Tables • On the Auction Block • INSTALL.SUB vs. INSTALL.COM •

April/May 1984:

Printing the Special Function Keys • Software for Attorneys • Easy Animated Graphics • Portable Psychology • Beyond the Joystick • WordStar, dBASE II and SuperCalc™ Data Sharing • An Osborne On Mount Everest •

List of RCP/M Systems

A worldwide network of remote CP/M bulletin board systems.

Revision #49 by Jud Newell

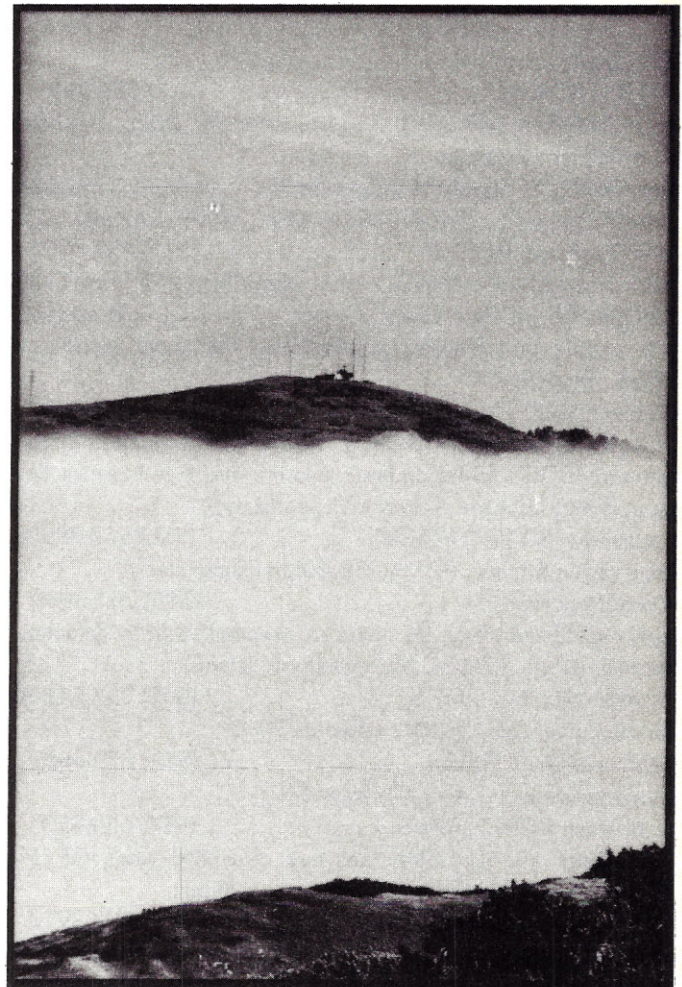
The following is a summary of all operating Remote CP/M (RCP/M) software exchange systems which use the Modem7 (Christensen) protocol (the XMODEM program), for file transfers. These systems are available to the general public for the exchange of public domain software. Some of these systems charge access fees, indicated by a \$ after the telephone number.

Unless otherwise indicated, all systems are 24 hours, 7 days with *no callback* (that is, you do *not* have to ring once, hang up, and call back). Local times of operation are listed after sysop's name. Callback systems have a **cb** before phone number.

Systems charging fees have a dollar sign \$ after phone number. Some systems may restrict "first-time" users. Be sure to read the opening info files when accessing a new system.

Baud Rates are shown after sysop name(s) or hours (PMMI=1-7): 1=110 / 3=300 / 4=450 / 6=600 / 7=710 / B=Bell 212A 1200 / V=Vadic 1200.

Disk Capacity (total disk space shown after baud rates): K=Kilobytes / M=Megabytes.



NORTHEAST

Connecticut

Xerox East RCP/M RBBS (203) 232-3180
Dave Shefelbine; (3B;10M); General Interest and Xerox 820-II
programs. (Hartford)

Connecticut Micro Decision UG (203) 445-5019
Steven Landers; (3;800K). CP/M Software, CPMUG,
Osborne, Morrow technical help.

Maine

Programmer's Anonymous RCP/M (207) 839-2337
Ralph Trynor; (3B;180K); Osborne Software; (Gorham)

Massachusetts

BINEX Boston Information Exchange (617) 423-6985
Glenn Meader, Andrew Moore; (3B;10M). M-TREE Message
System.
Andover Cnode (617) 470-2548
Layne DuBose; (1-7;18M); All C User's Group volumes on-line,
plus best of CPMUG. Also some Osborne, RS M100,
8088/8086 software; (Andover).
Milford S-100 User's System (617) 478-6062
Howard Moulton, Jr.; (no answer when in use); (3B;1.1M); ac-
cess password = "PDBIN" (must be upper case only); IMSAI
S-100 w/Z80.
Bellingham RBBS (617) 966-0416
Jim Devoid; (no answer when in use); (3;180K); Heath H8
system.

New York

C U R A RCP/M (212) 625-5931
Brian Callahan; (3B;10M); Kaypro, Osborne, Zram, Softbox;
(Fort Greene, Brooklyn).
Remote CP/M Facility of Dolgeville, NY . cb (315) 429-8185
Peter A. Polansky; (346B;500K); 8086, 68000; (Upstate NY).
CNY Technical RCP/M (315) 437-4890
Mark Howard; 5P-8A M-F, 24 hrs wknd (3B;52M); now 1200
capable; CP/M Plus Users' Group (CP-PLUG) host system;
Also Apple and Kaypro applications; Technical assistance
RBBS. (Syracuse)
Connection-80 TPM (RTPM) (516) 567-8267
Tom Vande-Stouwe; (3B;20M); Epson QX-10 and Osborne
software (FOG Library on line); also the message base for the
Long Island Osborne Network; (Long Island)
Connection-80 TPM (RTPM) (516) 567-8995
Tom Vande-Stouwe; 6P-9A; (3B;20M); (Long Island)
Mid-Suffolk RCP/M (516) 751-5639
Al Klein; 5P-9A daily, 24 hours weekends; (3B;5M); Telecom,
utilities, APple, IBM-PC, Kaypro (Long Island)
Johnson City, NY SJBBS (607) 797-6416
Charles; Eves, etc.; (3;2M); (Upstate NY)
Bearsville Town SJBBS (914) 679-6559
Hank Szyszka; (1-7;4M); (Upstate NY)
Woodstock RCP/M RBBS (914) 679-8734
John Doak; (134B;4.8M); (answers after 3rd ring), CP/M,
RCP/M, and some Osborne software available.
S.D.V. RBBS RCP/M (914) 769-2970
Richie Cawley; (3B;20M); Logical Drives A-F, user areas 0-5
available. (Osborne 1 w/external 20MB disk.) (Downstate NY)

Ontario, Canada

Willowdale CBBS (416) 226-9260 \$
Vic Kass; (3BV;50M); SIG/M, CP/M UG Library; (Toronto)
Toronto Ontario RCP/M Systems
..... (416) 232-0442 232-0269 231-1262 \$
231-0538, 232-1449 Jud Newell; (3BV;71M); allow limited ac-
cess without registration; (five systems available); (Systems 1-
3,5 for CP/ users, System 4 for IBM PC-DOS users, System 3
is a Kaypro network system); Annual \$30 fee allows access to
all five. >>> THESE SYSTEMS ALSO COLLECTION POINTS
FOR UPDATES TO THIS LIST. PLEASE SEND THE INFO.
AS A COMMENT ON LEAVING SYSTEM.
E-MX RCP/M (416) 484-9663
Simon Ewins; (3B;360K); Osborne Software. Distribution point
for e-mx mail system series of programs.(Toronto)

Quebec, Canada

Montreal RCP/M (514) 481-6329
Pierre Benard; M-F 6P-8A, wknd 24 hrs; (3;1.M)

Rhode Island

Providence RCP/M cb (401) 751-5025
Mark Rippe; 10A Sat-10P Sun; (3;1.2M); Msg system down

EAST CENTRAL

Maryland

Cambridge, Maryland RBBS/RCPM (301) 228-4621
Al Waller; (3;5M); Software Exchange, Ham Radio, Communi-
cations; (Maryland's Eastern Shore)
Pikesville RBBS/RCPM (301) 484-2831
John Madill; (3?;??); DEC, Rainbow, IBM-PC; Sponsored by lo-
cal Computerland store; (Baltimore)
BHEC RBBS/RCPM (301) 661-2175
Walt Jung, Charlie Schnepf, Harry Barley; (34B;10M);
(Baltimore)
Baltimore Heath Users Group (BHUG) (301) 768-1499
Allan McClure/Ricky Litofsky (34B;3M) If no answer after 2nd
ring, system is down for maintenance. (Baltimore)
St. Mary's College RCP/M (301) 863-7165
Jonathan Crawford; (3B;20M); Epson QX10 system; Features
special interest sections for different computers, educational
programs; (St. Mary's City)
Microcomputer Electronic Information Exchange
..... (301) 948-5718
John Junod, Lynne Rosenthal; (3;64K); (Gaithersburg)

New Jersey

CP/M-NET(tm) EAST [the only one] . (201) 249-0691 IMSW
(SYSOP's = Harry & Al); (3B*;40M); Otrona, S-100, Kaypro,
DEC, IBM, Osborne, Apple; Modem PGM's, Sig/m, CP/Mug,
Cug, Utilities, etc.; When database is full, the system will take
new callers at 1200 baud only! (Piscataway, NJ)

RIBBS of Cranford, New Jersey (201) 272-1874
 Bruce Ratoff; (1-7,B on request;3M); bulletin board of SIG/M,
 (Special Interest Group/Microcomputers, ACGNJ)
 KUGNJ1 RBBS Atlantic Highlands, NJ (201) 291-8319
 George Frankle; (3B;400K,(10M soon)); RBBS of Kaypro User
 Group of New Jersey; (Password="KUGNJ1"); (Atlantic
 Highlands, NJ)
 Flanders, NJ RCPM (201) 584-9227
 Ken Stritzel; (3B,1-7 on request;26M) Latest SIG/M releases
 The C-Line (201) 625-1797
 David Fiedler; M-F 8P-9A, wknd 24 hrs; (1-7;2M);
 UNIX/UNIX-like systems, C software; (Northwest NJ)
 Metroplex RCP/M (201) 722-8297
 Steve Holtzclaw; (3B;20M); Newly relocated from Dallas; Lat-
 est SIG/M-CPMUG releases; (Somerville)
 Paul Bogdanovich's RBBS (201) 747-7301
 Paul Bogdanovich; M-F 6P-11P, wknd 8A-11P; (1-7;1M)

Pennsylvania

Allentown RBBS/RCPM System (215) 398-3937
 Bill Earnest; (1-7BV;10M)
 Compusers RCP/M/BBS (215) 666-5381
 Mark Rodenhause, George Ligowski; (3B;10M) Part of
 Compusers Users Group of Valley Forge, PA. (Valley Forge)
 ChurchBoard BBS (215) 932-8829
 Byl Levering; (3B;??); Church related messages
 Greensburg RBBS-RCP/M (412) 836-8407
 Doug Borko; (3;??); Kaypro related files; (Greensburg)
 State College, PA. CUG-NODE (814) 238-4857
 Joe Shannon; (3;3M)

Virginia

Arlington RCPM/DBBS of Virginia (703) 536-3769 \$
 Eliot Ramey; M-F 10P-3P, wknd random; (1-7;800K); (Wash-
 ington DC area); (Minimum \$5.00 subscription fee.)
 Springfield RCP/M (703) 644-2299
 Roger Donais; (3B;10M), Kaypro, Osborne, Morrow Interests
 The Flying Circus RCP/M (703) 759-6627
 Mike Levy; (3B;10M); Interest in Kaypro; SIG/M CPMUG
 (Great Falls)
 OxGate-007 Grafton VA (804) 898-7493
 Dave Holmes; (1-7;5.2M); CP/M, TRS-80 & Apple software;
 (Tidewater)

MIDWEST

Illinois

Logan Square RCPM (312) 252-2136
 Earl Bockenfeld; (1-7;1M); Special interest databases. Daily
 change on B; (Chicago)
 RCPM PLUS (312) 326-4392
 Dick Lieber; (3B;??M); ???
 Palatine RCPM (312) 359-8080

Tim Cannon; (3B;4.8M); Disks on B, C & D are changed daily;
 (Chicago area)

Xerox Midwest RCPM/RBBS (312) 384-0013
 David Lowy; (12A-6P, other hrs no answer if in use);
 (3B;980K); Mainly for Xerox PC users, but all welcome. Pass-
 word required for system access; (Xerox 820-II system);
 (Chicago).

C.A.S.A.T. CBBS (312) 443-3744
 John Manning; (3;2.5M); Art, sound synthesis, video, analog &
 digital image processing, telecommunications, robotics; Locat-
 ed at the Center for Advanced Studies in Art and Technology
 at the School of the Art Institute of Chicago, this CBBS has
 been created to promote exchange between artists and all in-
 terested parties in the use of technology in art.; (Chicago)

Glen Ellyn West Suburban RCP/M (312) 469-2597
 Jim Mills; (36B;3.6M); (Chicago area)

Prairie View RCP/M (312) 537-7888
 Don Castella; 6P-8A Mon-Fri, 24 hrs wknd; (1-6B;3.6M) Heath
 H89 3 sets of disks changed daily (Chicago area)

AIMS, Hinsdale, Ill (312) 789-0499
 Mark Pulver; (1-7B;10M); Running both PMMI and Hayes
 1200 modems, 1200 detect at second c/r then 3 sec delay to
 switch modems. (Chicago)

Chicago RCP/M (312) 941-0049
 John Sojak; (3B;35M); Running both PMMI and 1200 Baud
 (Chicago)

Indiana

Bloomington RCPM/RBBS (812) 334-0609
 Bob Jacobs; (3B;2M); (four carriage returns to bring up sys);
 current public domain software, amateur radio (satellite).

Kansas

Wichita RBBS/RCPM (316) 682-9093
 George Winters; (8P Fri-11P Sun); (3B;300K); member of FOG
 OPEK (Osborne Portable Enthusiasts of Kansas) chapter.
 Mission, KA RCPM (913) 362-9583
 Bill Parrott; (3B;7M); Heath/DG Super 89 system.
 AlphaNet RCP/M RBBS (913) 843-4259
 Larry Miller; 6P-9A daily; (3;700K); B drive changes daily.
 (Lawrence)

Michigan

Schooner Cove (Ypsilanti) RCP/M (313) 483-0070
 Michael Wesley; (3;644K); B: changed daily, sysop will mount
 any disk on request. (Ann Arbor-Detroit area).
 MINICBBS/Sorcerer's Apprentice Group .. (313) 535-9186
 Bob Hageman; (1-7;500K); Sorcerer software and hardware;
 (Detroit area).

Southfield, MI, RBBS/RCPM (313) 559-5326
 Howard Booker; (3;2.7M); BDS C programs, doc. files.
 Tony's Corner RBBS (313) 754-1131
 Tony Bauman; (3B;???K); TRS-80 Model I system.
 Royal Oak CP/M (313) 759-6569
 Keith Petersen; (1-7;26M); MiniCBBS available but main purpose is file transfer; (Detroit area).
 XEROX CORP RBBS cb (313) 827-2266
 Brad Harper; (3;???K); If calling during working hours - call by voice first, after 5P call, hang up after recorder starts and call back immediately.
 Technical CBBS (313) 846-6127
 Dave Hardy; (1-7;3M); RCPM sysops desiring access to passworded RCPM Clearing House system should leave msg on TCBBS; (Detroit).
 OPTEC RBBS (616) 897-8628
 Jerry Persha; baud/disk unknown; Open system; interests in prof and amateur astronomy relating to photometry. (Lowell, MI).
 Grand Traverse RCP/M (616) 947-1246
 Bill Jungers; (3B;10M); Kaypro, Franklin/Apple, Televideo; A member of the Kaypro Network; (Grand Traverse).

Minnesota

TCRCP/M Twin Cities RCP/M (612) 333-5947
 Larry Linde; (3B;5M); RBBS written in 'C'; (5 Mhz Big Board); (Minneapolis).

Missouri

St Louis HUG RBBS (314) 291-1854
 John Griffith; 1A-9A daily, 24 hrs on Sunday; baudrate and disk size unknown; H-89 system.
 KAY-PER NET (816) 734-2717
 Ron Smith; (3B;10M). If no answer, voice call to SYSOP at (816) 4987 should correct the problem.

Ohio

Dayton RCPM/RBBS (513) 256-7227
 Dave Robling; (1-7;1M); (Dayton).
 Cincinnati RBBS (513) 489-0149
 Henry Deutsch; 6P-6A daily; (1-7;1.8M).
 Columbus CBBS (614) 272-2227
 John Walpole; (1-7;300K); BDS-C programs.
 Pickerton RBBS (614) 837-3269
 Greg Bridgewater; (3;1M); Running TRS-80 with Omikron.

Wisconsin

CHANL-3 RCP/M MYBBS (414) 353-1667
 Bill Ganley; (36B;5.5M); CB-80, Communications, S-100 system running USR S-100 modem; (Milwaukee).
 Fort Fone File Folder (414) 563-9932
 Al Jewer, Shawn Everson, Ron Fowler; (1-7;20M); (Ft. Atkinson).
 Milwaukee Heath Users Group RBBS (MHUG) (414) 873-7564
 Mike Wesolowski; (3;15M); PRIVATE system maintained by Milwaukee Heath Users; running on Heathkit H89.

SOUTH

Alabama

NACS/UAH RBBS/RCPM cb (205) 895-6749
 Don Wilkes; (1-7;700K); (Huntsville)

Florida

Astronomer's RBBS & RCPM (305) 268-8576
 Chuck Cole; (no answer when in use); (3B;492K); Astronomy & science special interests: CFAS, AAVSO, ISRG, IAPPP, SERAL, and CANDL; (will have 2.4MB on-line soon); (Titusville).
 SIMMS 002: Silicon Beach RCP/M (305) 439-5754
 Steve Sanacore; (3;256K); Apple CP/M; Multiple Message Bases; (West Palm Beach).
 Melbourne RCP/M OXGATE (305) 676-3573
 Alex Soya; (3B;20M); new releases of CPMUG and SIG/M software; Information exchange re: hardware problems & fixes, especially S-100 machines; Interest in CPM86 & CPM68K software; (Melbourne).
 Orlando, Florida RCPM System I (305) 677-8086 \$
 Larry Snyder; (3BV;24M) Special interests in Compupro hardware, communications, spreadsheets, dBASE II, C-86, CP/M-816 and MP/M-816. \$30 annual membership, limited amount of users. Second system soon on-line supporting software compatible under MPM 8/16. Sysops, leave message on Detroit Sysop System for Complimentary membership.(Compupro 816 CP/M-80); (Suburb of Orlando).
 Miami Bulletin and Exchange Board (305) 854-7274
 Jack Lamont, Kevin Killey, Calvin Thompson; (3B;6M); Kaypro 10 or at times a Kaypro II. Atari section, community involvement promoted.
 CCPB-RCP/M Computer Club of the Palm Beaches (305) 967-0344
 Mark Fay; (system I: TU & TH 9P-12P; SU 12A-12P); (1-7;1.8M); Interest in libraries of recent and classic CP/M software. Jim Flora; (system II: M, W & F 9P-12P); (1-7;1.2M); Interest in ASCII printer graphics, CB80, and general CP/M software; (NOTE: Phone answered voice other hours.) (West Palm Beach).
 Tampa RCP/M (813) 831-7276
 Charlie Hoffman; (3B;20M); New 20MB hard disk; Interest in 'C'; SIG/M-CPMUG releases; Tampa Bay CP/M User's Group.
 PRO-COM DATABASE (813) 937-3608 \$
 >> (Formerly known as: The Tampa Bay Bandit Board RCP/M) Steve Sanders; (3B;10M); Private system; \$25/yr fee; monthly newsletter; 2nd system soon; Headquarters of the Kaypro-Net-work; new users may log on to leave message for info/application; Latest SIG/M-CPMUG; Turn-Key K-NET 84 (tm) RBBS-RCPM Systems available. (Tampa Bay). >>> THIS SYSTEM ALSO A COLLECTION POINT FOR UPDATES TO THIS LIST PLEASE LEAVE INFO AS A COMMENT BEFORE EXITING SYSTEM.

Georgia

Atlanta RCP/M-RBBS (404) 627-7127
Jim Altman; (3B;4M); Soon to be 200 Mbyte; Interest in 'C',
SIG/M, CPMUG releases; no answer when in use. (Atlanta)
Acropolis RBBS/RCPM (912) 929-8728 \$
Tony Stanley; (3B;10M); Support system for K-NET 84 (tm)
RCPM-RBBS software; Kaypro, Heath/Zenith, CPMUG and
SIG/M software; New users must be verified before accessing
the system; (Warner Robins, GA).

Kentucky

Ovation Network RCP/M (606) 273-8634
Jay Denebeim; 6P-9A M-F, 24 hrs wknd; (3B;5M); Kaypro Lex-
ington User's Group (KLUG); a KayPro-Network system; (Lex-
ington) (NEW NUMBER as of 1/20/84).

Louisiana

Bossier RCP/M (318) 742-1772
Tom Chandler; (3;2.6M) Interest in CP/M, Utilities, Games, 16
bit. (Bossier City, LA).
Redstick RCPM (504) 275-7846
Ken Shutt; (3;1.6M); CP/M+, Operating systems; (Baton
Rouge).

Tennessee

Physician's Responsive Information System
..... (615) 967-6889
Dudley Fort; 5P-9A M-F; (3B;800K); Kaypro RBBS; major in-
terest in medical software and information; on-line articles on
topics excerpted from medical journals. (Mail address: Rt. 3,
Box 289A, Winchester, TN 37398).

CALIFORNIA

Northern California

OxGate-005 Fresno Micro Fone (209) 787-3511
Bob Robesky; M-F 7P-7A, wknd 24 hrs; (3BV;25m); Standard
and new CP/M 80/86, 'C', dBASE II, IBM-PC DOS [no answer
if in use].
Merced HUG CBBS/RCPM (209) 383-6417
Clinton Cook; M-Th 6P-12P, wknd 24 hrs; (B2;2M); System
powered down until modem lock; Interest in CP/M, modem,
Basic programs; (Merced, CA).
San Jose DataTech Node 007/Piconet Node 003
..... (408) 238-9621
Al Mehr; (3B;20M); ZCPR2, CP/MUG, SIG/M software.
Santa Clara RBBS/RCPM (408) 247-2853
Jeff King; 8A-11P M-F, 24 hrs wknd; (3;20M).
Oxgate-002 RCP/M Milpitas (408) 263-2588
Mel Cruts; (system hrs may be erratic due to heat); (1-7;12M);
(south SF bay area).

PicoNet #4 Wizard's Keep RBBS-RCP/M .. (408) 281-7059
Rick Hobbs; (3;20M); Will answer technical questions on
Osborne 1; (San Jose).

Skyhouse Systems (408) 296-5078
Kirk De Haan; (no answer if in use); (3B;30M); NEW number
and format; (Santa Clara).

OxGate-001 (408) 354-5934
Chuck Metz & Paul Traina, Monte Sereno, CA; (3B;20M); (San
Jose area).

POTPOURRI BBS & RCP/M Oxgate-012 .. (408) 378-7474
Wayne Masters, San Jose, CA; (3B;20M); Engineering Applica-
tions, Compilers, Assemblers, disassemblers & free JRT Pas-
cal. Special software for sysops on A10; leave name and
system phone number.

OxGate-dBASE II RCP/M (408) 378-8733
Roger D. Brown, Campbell, Ca.; (3B;4M); dBASE II is available
on this system to demonstrate software from independent soft-
ware developers. System will soon be converting from OxGate
to a BBS written in dBASE II. (San Jose area).

Atlas Micro Associates "MCI" RCP/M-RBBS (408) 379-8086
Bill Spoolhoff; 7P-10P M-F, 24 hrs wknd; (1-7;2.4M); Invest-
ment software, dBASE II, CB-80; NOTE: When system un-
available, you will receive short VOICE message and be
disconnected; (San Jose).

COMP-NET RCPM-RBBS (408) 637-1404
Curtis Elliott; (3;10M); soon to be 1200 bps also; member of
the K-Net and running K-NET 84 (tm) system on Kaypro 10.
SiMMS 003: "BAYLIST" RCP/M (408) 730-8733
Eric Sarti; 4P-10P; (3;256K); Multiple message bases.; (south
SF bay area).

SiMMS 001: Network Headquarters (408) 732-9190 \$
Ed Svoboda; (3B;44M); Silicon Multiple Message System; Mul-
tiple message bases. 1000's of files online, including new re-
leases, communications, 16-bit, 'C', utilities, Apple, Osborne,
CompuPro. Non-profit system. To register, send name, ad-
dress, and password of exactly six chars, along with \$25/yr
membership donation (if out of S.F. Bay Area or can't afford,
this is not required) and SASE to SiMMS Network HQ, Attn:
Registration, Box 532, Cupertino, CA 95015. Distributes
SiMMS. Write for more information. (CompuPro 816 CP/M-
80); (south SF bay area).

CrosNest II (DataTech Node 014) (415) 341-9336
Wilbur H. Smith; (3;2.8M); (Box 962, San Mateo, Ca. 94403)
CDOS, CP/M hardware/software types/bulletins/educational
utilities and communications software (SF Bay area).

RBBS of Marin County (415) 383-0473
Jim Ayers; M-F 5P-8:30A, wknd 24 hrs; (1-7;10M); Now up
with 10 meg drives A:E., user areas 1-2 w/ SIGM and
CP/MUG pgms; (SF bay area).

Rich & Famous RCP/M (415) 552-9968
Stephen Price, Ralph Nishimi; (3B;760K); games, communica-
tions; (San Francisco).

DataTech Network Headquarters System .. (415) 595-0541
Edward Huang; (3BV;1M); (Box 290, San Carlos, CA 94070)
Hub of DataTech Network. Heath/Zenith/TRS-80, utilities
and communications software. (SF Bay Area).

Humor and Wisdom (415) 674-0660

Wayne Webber; (3B;1.5M); Humor, jokes, poetry, insights, etc; also supports software download/upload. (SF Bay Area).
 Napa Valley RBBS/RCPM (707) 257-6502
 Dave Austin; (1-7;1.2M); Features: Apple, Atari, Compupro, Morrows, Osborne, TRS, CP/M software; interest in BDS/Aztec C, dBASE II, Ham Radio; (Napa).
 Fairfield RBBS/RCPM (707) 422-7256
 Mark Bournival; (3(1200 soon);3M); CPMUG & SIG/M, general CP/M software; (Northstar w/ 8" drives); (Sacramento area).
 XEROX NORTH COAST RCPM (707) 725-5230
 Michael Mayfield; (3;644K); No answer when in use; Approx 1000 public domain files, B drive changed every 2 days; XEROX 820-II PC Based; (Fortuna).
 Critical Mass RBBS/RCPM (707) 884-4221
 Ken Mobert; (3;26M); Osgate system; (Gualala).
 CBBS/Sacramento (916) 483-8718
 Joe Bergin; (3?;??).
 Orangevale RCP/M (916) 988-2660
 Ken Benedict; (3B;??); No answer if in use. (E. of Sacramento).

Southern California

Los Angeles RCP/M (213) 296-5927
 Bob McCown; (1-7;2.5M); System features catalog of the latest CP/M, Apple, Atari, TRS-80 and IBM PC software; (west LA).
 PatVac (213) 306-1172
 "Pavlov's Cat", (Harris Boldt Edelman); (3B;366K); a magazine for the Real Programmer whose defenses are down. Expect to find various flaky logon and menu programs running that are in test phase. System has lacked a bbs program since Nov.'83; this seems to confuse novices. Do Not Be Deterred. (Venice)
 ThreePalms MAX BS RCP/M (213) 430-0079
 Rick Edwards; (3B;1.5M); Lobo Max 80 Bulletin System running CP/M Software. Member of MAXIML (MAX-80 Users) (Seal Beach).
 Bankers & Hackers BBS/RCPM (213) 498-6581
 Don Appleby; (3B;1.8M); N* system with NZCPR.
 G.F.R.N. Data Exchange (RBBS) (213) 541-2503
 Skip Hansen; (3BV;2.4M); ham radio-related pgms; (Palos Verdes).
 Catholic Information Centre (R)BBS (213) 545-2146
 Father John Higgins (3,10M); 8AM-10PMPST. Information on the Catholic Church, question/answer forum for all. (South Bay Area).
 ComputerFood Press MBBS/RCPM (213) 559-9033
 Tom Tucker; (3B;382K); Interests include small business systems.
 The MAX BS RCP/M cb (213) 598-7412
 Rick Edwards; (3B;1.5M); Lobo Max-80 Bulletin System; TRS-80 and CP/M software; member of MAXIMUL (MAX-80 User's League); callback implemented; (Seal Beach).
 El Segundo BBS (213) 640-2545
 Larry Chafe; (3?;??); Games, software demos.
 MBBS Headquarters RCP/M (213) 653-6398
 Kim Levitt; (no answer if in use); (3B;382K); System running under ZCPR2; Headquarters for Micro Bulletin Board System

(tm) >>> THIS SYSTEM IS ALSO A COLLECTION POINT FOR UPDATES TO THIS LIST. PLEASE SEND THE INFO. AS A FILE AND/OR MESSAGE TO SYSOP.

Southern California Computer Facility (213) 746-7427
 Gene C. Brown;(3,780K;CALL BACK); Unlimited BBS Use, membership required to access RCP/M software. Some software on line.
 XANADU (213) 906-1636
 Rick; (3B;4M); CP/M access granted after first call. 9 different interest sub-boards. (Sherman Oaks, CA).
 Los Angeles Communication System (213) 935-7570
 Steve Huntley; (3B;780k); Kaypro based system. Kaypro utilities, CP/M Utilities and communications.
 Barstow RCP/M (619) 256-3914
 Bill Wood; (34BV;5.5M); H89 system (does not see CR's for 8 secs after carrier detect, while system auto boots).
 San Diego RCPM (619) 273-4354
 Brian Kantor; (3BV;2.4M); (San Diego).
 SABA-HOM-LINE CBBS (619) 692-1961
 Don Saba; (3B;2M); Special interest in Apple CP/M.
 ASCII ATTIC (714) 381-2083
 Bob Ward; (3B;10M); Kaypro 10 system; (San Bernardino).
 Mission Viejo RCPM/CBBS (714) 495-9384
 Bob Mathias; Tue-Sat 7:30P-5A, Sun-Mon 24 hrs; (3B;10M); hobby computing, Ada, and Pascal; Zenith Z100.
 G.F.R.N. Data Exchange (RBBS) Garden Grove . (714) 534-1547
 Doug Laing; (3BV;5M); amateur radio, Apple/CPM; (Garden Grove).
 San Dimas RBBS/RCPM (714) 599-2109
 Stu Anthony; M-F 8A-7P, wknd 24 hrs, (try anytime); (3B;964K); Xerox 820-II.
 AnaHug RCPM/CBBS (714) 774-7860
 John Secor; (3B;10M); hobby computing, ham, electronics hobbyists; Now has 300/1200 212A baud; (Anaheim).
 Sit Back and Wackit (714) 995-2428
 Robert Collins; (3B;655K); IBM-PC utilities, 8087 source code; modem programs; APL utilities and hotline; COMPAQ system with 2 RAM disks, 8087 co-processor and Hayes 1200B modem.
 Thousand Oaks Technical RCP/M (RIOS) Sys 1
 (805) 492-5472
 Trevor Marshall; (3,36B;66M); Use CHAT to request noise resistant 300 baud modem; active bulletin board, all software released by SIG/M, PC-Blue & Capitol-PC Users Groups on-line. Most C-UG vols. 7900+ files on line. Use SYSTAT & MOUNT to access subdirectories. TIME LIMIT now 1 hr/session (multiple sessions OK), increased by 2 for 1 for uploads. New modems. Couldn't get in before? Try now.
 Thousand Oaks Technical RCP/M (RIOS) Sys 2
 (805) 493-1495
 Trevor Marshall; (3B;65M); No bulletin board, unlimited upload time, download time limited to 15 mins/day, (increased by 2 for 1 for uploads); additional time allocated for program contributors and sysops (policy will evolve as system loading becomes known). (Networked to same 64MB hard disk as system 1.)

Simi RCP/M (805) 527-2219
 Pete Mack; (M-F 7P-7A, wknd 24 hrs); (3-6,B;20M); General interest programs plus special interest in 'C'; Also interested in 88/86 PC software; (Simi Valley).
 Gil Berry's Simi RBBS (805) 527-8668
 Gil Berry; (no answer if in use); (3;270K); Apple II system; engineering, robotics, science, music; (Simi Valley).
 SIMIAPPLE/RCPM (805) 584-6054
 John Damico; M-F 7P-11P, wknd 24 hrs; (3;6M); interest in modem, rcpm and amateur radio software; (Simi Valley).
 LOBO MAX-80 RBBS (805) 964-6626
 Tom Marazita; 24hrs (more or less); (3B;2.4M); MAXIMUL (Max-80 User's League) software, CP/MUG, SIG/M, dBase, PASCAL, 'C'; (Goleta).
 Granada Engineering Group RCP/M (818) 360-5053
 Webber Hall; (3;1M); CP/M assembly language programming and technical information; (Granada Hills).
 The MOG-UR'S HBBS (818) 366-1238
 Tom Tcimpidis; (34B;19M); 11 different boards, varied interests. Database use welcome to all systems, operating systems and users; (San Fernando valley, LA area). This board recently closed by the Feds.
 Pasadena RBBS (818) 577-9947
 Rich Berg; (1-73BV;3.98M); Note: system power off until modem carrier lock. (does not recognize CR's for 15 secs after lock, while system auto boots), Heath H89; (LA area).
 Woolf Software BBS (818) 704-1871
 Jeff Woolf; (3;600K); soon 1200 baud & 2M; "MOVE-IT" as well as XMODEM protocol supported; Communications; all welcome.
 Northridge RCPM-XBBS (818) 708-3284
 Robert Crump; (3;???).
 La Canada RCPM/RBBS (818) 790-3014
 Chris Hays; (no answer if in use; allow 4 rings for autoboot); (3B;1.3M); electronics, communications software; (LA area).
 Altadena RCPM/RBBS (818) 798-9673
 Mark Heriot; (3B;360K); No answer if in use; Osborne 1, TRS-80 PC-2, general CP/M prgms, typesetting interfacing; will help with tech questions about Osborne (ROM or BIOS or actual hardware); (Altadena).
 Pasadena CBBS (818) 799-1632
 Dick Mead; (1-7;8.3M); (LA area).
 Xanadu RCP/M (818) 906-1636
 Rick Gaitley; (3B;3.1M); Heathkit H/89 system.
 Litemaria RBBS (818) 956-6164
 Abel Iwaz; (3B;400K); Forum for exchange of ideas on literary topics; Support for Kaypro II owners.

SOUTHWEST

Arizona

Valley Technical RCPM (602) 938-7480
 Ed Richardson; (3B;40M); need more info; (Phoenix).

Colorado

The World Peace RCP/M (303) 320-4822
 Alfred K. Carr, Archbishop; (3B;16M); sponsored by the Church of World Peace, Inc.; newest public domain software; MAILBOX message system; legal tax planning; church related info for member churches of the World Peace Convention and church members; no religious affiliation required to use this system; (Denver).
 Boulder, Colorado RCPM (303) 499-9169
 Jack Riley; daily 12P-6A, hard disk up 7P-12A thursday; Keyword-based bulletin board, high-level language software, graphics, numerical analysis & UNIX info, MX-80 graphics, typesetting; (1-7BV;32M).
 Colorado Springs RCP/M (303) 591-8756
 Bruce McDaniels; (3B;?). 1pm-11pm, Monday-Saturday only.
 Colorado Springs Computer Communications Service . (303) 598-4500 \$
 Thom Foulks; (3B;2.1M). Members of Colorado Spring User Group only. Online application available.
 Pinecliffe RMP/M RBBS (303) 642-3034
 Craig Baker; Irregular hrs, 24 hrs. soon, (try anytime); (3B;16M); Login by using "LOGIN" program. On-line databases on such topics as nuclear power, Retrieval system, MP/M-II mods, interest in active discussions; (Pinecliffe).
 Denver CUG-NODE (303) 781-4937
 ? Sysop; (1-7;1M)
 Lakewood RCPM/RBBS (303) 985-1108 \$
 Gary Shaffstall; (3B;38.4M); (300 baud restricted-send SASE to P.O. Box 28146, Sta 16, Lakewood, CO 80228 with up to 6 char password); (Denver area).

Nevada

Reno International (RIBBS) RCP/M (702) 826-2337
 Ron Stevenson & Mike McBride; (13;2.4M); EXO noBUS-8 system; Soon (13B;15M); Special sections and nights for different computers; Hotels, Entertainment and Restaurant data base for Reno, Carson and S. Lake Tahoe w/toll free numbers for reservations; say ENT; (Reno).

New Mexico

Four Corners RCP/M (505) 327-2344
 Jack Cribbs (?;?)...new system, more info needed.
 Mesilla Valley RCP/M (505) 522-8856
 Phil Cary; (34B;10M); special interest in CB80; (Las Cruces)

Texas

Dallas RCP/M CBBS (214) 931-8274 \$
 Dave Crane; (3B;28M); public domain software and information exchange, CP/M-80 and 86, PC-DOS, Forth, dBase. Special interest in science and engineering. Annual \$30 fee, limited membership.
 Ft Worth RCPM/Metroplex KUG BBS (817) 467-5110
 Gary Spencer; (3B;10M); 7P-7A M-F, 24 hrs on weekends; SIG/M-CPMUG releases; now on Kaypro 10; a Kaypro-Net-

work system; running K-NET 84 (tm) RCPM-RBBS System software; Users must be verified before accessing; (Arlington). Computers Unlimited RBBS/RCPM (817) 547-8890 Jack Kinn; (3B;20M); Full XMODEM; (Copperas Cove TX). SENECA (El Paso RCP/M) (915) 598-1668 \$ Sigi Kluger; (3B;12M); Interest in N* and latest releases; \$25 per year membership fee.

NORTHWEST

Alaska

Anchorage Remote CP/M (ARCPM) (907) 349-7996 \$ Rodger Ellis; (3B;15M); By paid subscription, \$6.50/month. Limited to 100 members. Several memberships still vacant. Call (907) 349-6882 voice. Or write ARCPM, 740 W. 71st Ave., Anchorage, AK 99502 for membership application.

Alberta, Canada

Edmonton RCPM (403) 454-6093 Dave McCrady; (no answer when in use); (3BV;3.8M). Stadium RCP/M (403) 471-8080 \$ Gary McCallum; (3;20M); (Edmonton). Meadowlark RCP/M (403) 484-5981 Jim Lopushinski; (3B;3M); Origination point for NSQueue, LBRDISK, and other machine language programs.

British Columbia, Canada

Frog Hollow CBBS/RCPM (604) 937-0906 David Bowerman; (1-7;1.2M); (Vancouver).

Montana

Helena Valley RBBS/RCPM (406) 443-2768 Marion Thompson; (no answer when in use); (3B;5M); Photo-typesetting service, special interest in S-100; (Helena).

Oregon

Chuck Forsberg's RCPM (503) 621-3193 Chuck Forsberg; (3BV;??K). Beaverton, Oregon RCPM (503) 642-7028 Dave Morgan; (3B;26M); Special Interest in Computer Art and newest releases of software.

Washington

Olympia RCPM (206) 357-7400 Tim Linehan; (3B;18M); Interest in 'C', database pgms, & string manipulation; Most CUG software on-line. Yelm RBBS & CP/M (206) 458-3086 Dave Stanhope; (3B;80M); S-100 UNIX system; CP/M programs; interest in 'C'; Running BBSC for UNIX-C; (Olympia). Northwest Computer Society RCP/M (206) 621-8665 George Blat, Wayne Campeau, Jim Mitchell; (3B;34M). SMUG RCPM/RBBS (509) 255-6324 Bruce Jorgens, David Schmidt; (3B;26.5M); Spokane Microcomputer Users' Group; Interest: Kaypro, Osborne, 'C', dBASE II and CP/M 86 software, also ZCPR2; (Liberty Lake).

HAWAII

Kauai RCP/M RBBS (808) 245-2080 Gene Clayton; (no answer if in use); (3B;800K); (Lihue). Hawaiian Shell RCP/M (808) 422-8406 George Sofaly; (3B;800K); Network system; interests in Kaypro; RCP/M for Hawaii Portable Computer Users Assocn. (Honolulu)

COMPUSERVE

CP-MIG .. on MicroNet, type 'R CP-MIG' or 'GO PCS-47' \$ Dave Kozinn, Tom Jorgenson, Charlie Strom arranging to have MN carry much new CPMUG and SIG/M software, plus a newsletter and a CP/M-oriented CBBS. COMPUSERVE users have full access to CP-MIG. (Fees required to join CompuServe.)

NOTES:

1. Call-back systems are those where a computer and real people share the same telephone line. To contact the people, just dial and let the phone ring until you get an answer. To contact the computer: (1) dial, (2) let the phone ring once, (3) hang up just before the 2nd ring, and (4) re-dial.
2. Note that the 212A/Vadic 1200 baud modems may not be compatible with yours. Some of the above systems are using Vadic 3451 Triple modems, compatible with both Bell and Vadic Standard. Sign on the first time at 300 baud to determine the system capabilities. Note also that PMMI modems can sometimes be used over 300 baud with 1200 baud systems. PMMI baud rates are: 110, 300, 450, 600, 710 and are indicated above as "1-7".
3. Use of an alternative long-distance service should be considered when planning to modem over long programs. Charges on ITT Longer Distance, MCI, Sprint and Western Union are 50-60% of AT&T's regular long distance rates. These services and many others are available in many areas of the country and many of them can now call anywhere in the U.S. and will work fine at 300 and 1200 baud most of the time. (Note, however, that you might not be able to dial a system in Alaska, Hawaii or Canada depending on the service you get and sometimes you may have trouble connecting at 1200 baud.)
4. Total on-line disk capacity is shown for reference. Check the system documentation for exact details when logging on.
5. All times listed are local time, please observe operating hours for systems with scheduled availability.



UserGroups



inches of uncoiled cord that resides therein. This does not hinder packing up the machine. Just lay the coiled part in its usual place and the straight part will fold into a loop in front of the A drive. If you use the machine propped on the keyboard, just tuck the cord in the storage pocket to keep it out of the way.

Do-It-Yourself Tips For Ozzy Owners

Roderic Knight

Osborne owners, having purchased the best buy for their money in a microcomputer, are obviously a cost-conscious lot. And judging from the proliferation of User Groups, we are all eager to share our discoveries and swap hints with each other.

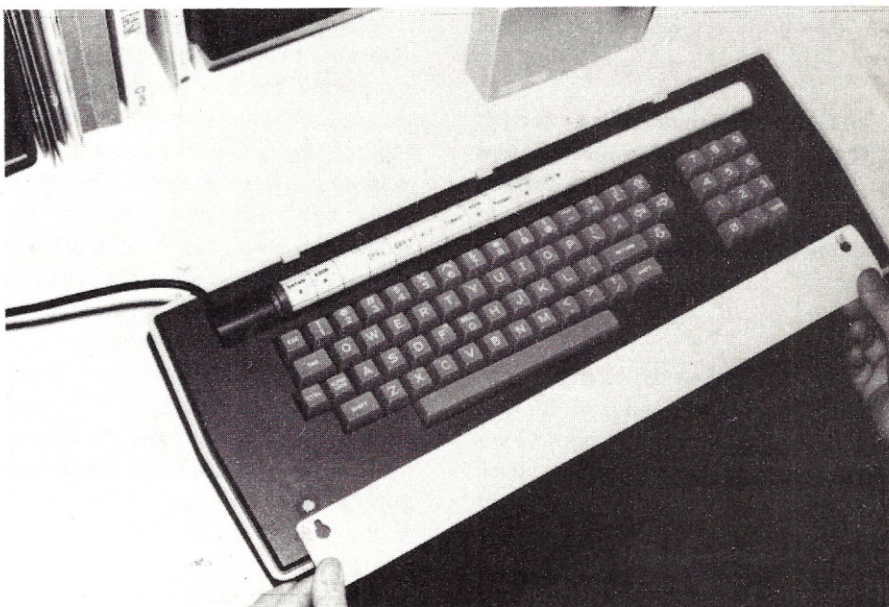
In addition to the usual computer shop talk that goes on at our meetings, we in Oberlin have come up with a number of easily implemented ideas that make the Osborne even more handy, versatile, ergonomic, and inexpensive to run than it already is. In view of the increasing number of ads for sometimes classy but usually overpriced gadgets appearing in magazines, we thought it would be worthwhile to pass on these hints to the readership. My thanks to Mike Sabiers, James Helm, and Harold Lee for the first, third, and fourth ideas given here.

A Longer Cord

If you feel constrained by the coiled cord for the keyboard (especially likely if you have a larger monitor sitting beside Ozzy on the desk and want your keyboard in front of it), remove the four Philips screws on the underside of the keyboard and free up an extra eight



After removing the extra eight inches of uncoiled cord from the inside of the keyboard.



Attaching a venetian blind hand rest to the Osborne keyboard.

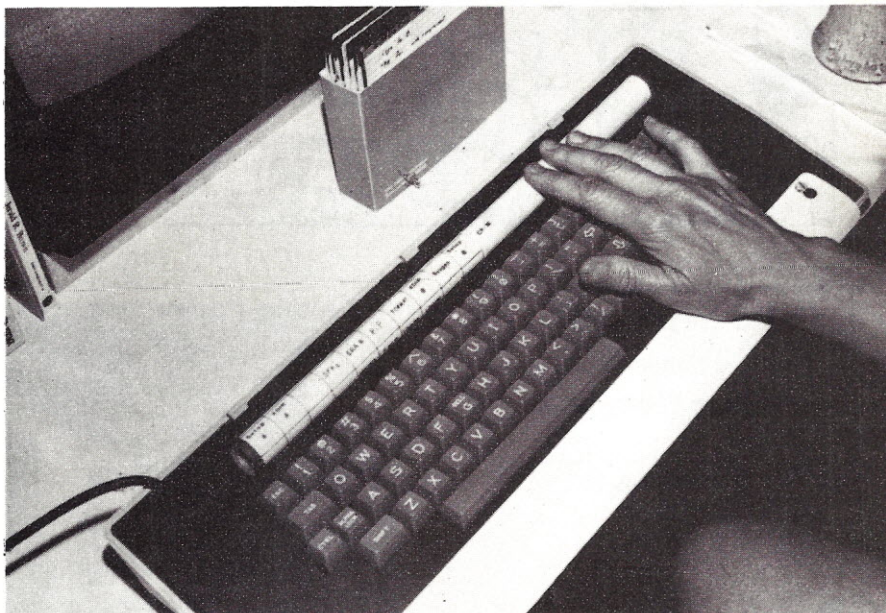
UserGroups

A Smooth Lip For The Keyboard

If you are in the habit of resting your hands on the edge of the keyboard while staring at the screen, you may have noticed that the edge is not very smooth, especially for the left hand, resting right on the latch.

The solution is an 18" piece of 2"-wide Venetian blind (not so easy to find any more, but available nonetheless). File the edges round, then tape it to the keyboard with a couple of pieces of strapping tape, so that the upper edge is about 1/8" below the space bar. It can be easily removed when packing the machine.

If you want something more permanent, but still removable for packing, get two short sheet metal screws with big flat heads. Drill two holes at each side of the upper edge of the blind as shown in the accompanying photo.



Note:

Note: Since the blind is very thin, the larger drill may snag. If it does, stop and finish the hole with a file. Snagging can be minimized by drilling a small hole first, then gradually increasing the drill size.

The larger hole must be large enough for the screw head to pass through, and the smaller only large enough for the shank. File out the space between to make the holes this shape:



Place the blind on the keyboard just beneath the space bar and mark the center of the large holes. Drill here (don't worry, there's nothing under this space on the keyboard), and screw in the sheet metal screws, leaving just enough space to slip the blind snugly under the screw head.

It will be held firmly in place but is easily removed.

A Rolling Reminder For Function Keys

A pricey version of this device, which rests in the trough above the keyboard, has appeared in the ads recently, but a good homespun version can be made with a piece of broomstick (the best diameter is 7/8" or 1") and a sheet of paper.

Wrap the paper around the stick to determine the amount needed to cover it completely. Draw a grid on the paper with ten columns, each 3/4" wide (total width: 7 and 1/2 inches), and as many rows as you wish. A vertical spacing of about 5/8" will give you four rows around the stick, but if you have more special function key setups to keep track of than this, the roller will easily accommodate at least twice this many.

The stick should be at least 8" long to accommodate this grid, plus 1/2" at the edge to identify each row. But I recommend making the stick longer so you can push it "home" to one end of the trough or the other, thus assuring the proper alignment with the number keys. Make it nine and a half inches long to home it to the left, and fifteen inches long to home it to the right (see photo).

The rolling reminder to remember your function key setups.

Label the rows with the programs you use and fill in each row with short reminders of what each SFK does for that program. A simple touch of the hand moves the roller to display the row you need at any moment.

Front Legs

While using your Osborne propped on the keyboard in the standard way, have you ever had it collapse or slip off unexpectedly? This can be avoided very simply while still maintaining the usual orientation of keyboard and screen. Go to the sporting goods store, buy two archery blunts (the type used for stunning rabbits — they sell for about 3 for \$1.00).

Cut them to 6-1/4" including the rubber tip. Insert these in the deep screw holes on the underside of the case and your Ozzy will be propped up at just the right angle, resting on stable rubber feet. The keyboard can sit in its usual position, or it can be moved as much as the cord will allow, without capsizing the rest of the machine.

UserGroups

"Flippy Disk" Kit for \$1.50

By now everyone has heard of "flippies." By punching three holes in your single-sided disk envelope you gain access to the flip side, which, although not certified to work, usually turns out to be just as good as the guaranteed side. (Hint: format this side before cutting your holes. It is unlikely that the manufacturer will take back a disk that's been made into a flippy if the original side turns out to be defective.)

Two problems to which flippies are potentially prone have been noted by some writers: (1) On disk drives de-

signed to read only one side of a disk (as on the Osborne), there is a pressure pad on the opposite side that might conceivably cause some trouble to files that it rubs against, and (2) the envelope material may look like it's cutting cleanly, but there is a chance that a minute fragment of it could get lodged inside.

In spite of these potential hazards, many people find the idea attractive, at least for non-critical material. If you are one of those people and have not already bought a kit that is on the market for *twenty times* the price above, then read on. All you need is an ordinary paper punch (the type that looks like pliers), a simple template (shown in figure 1), and a pencil.

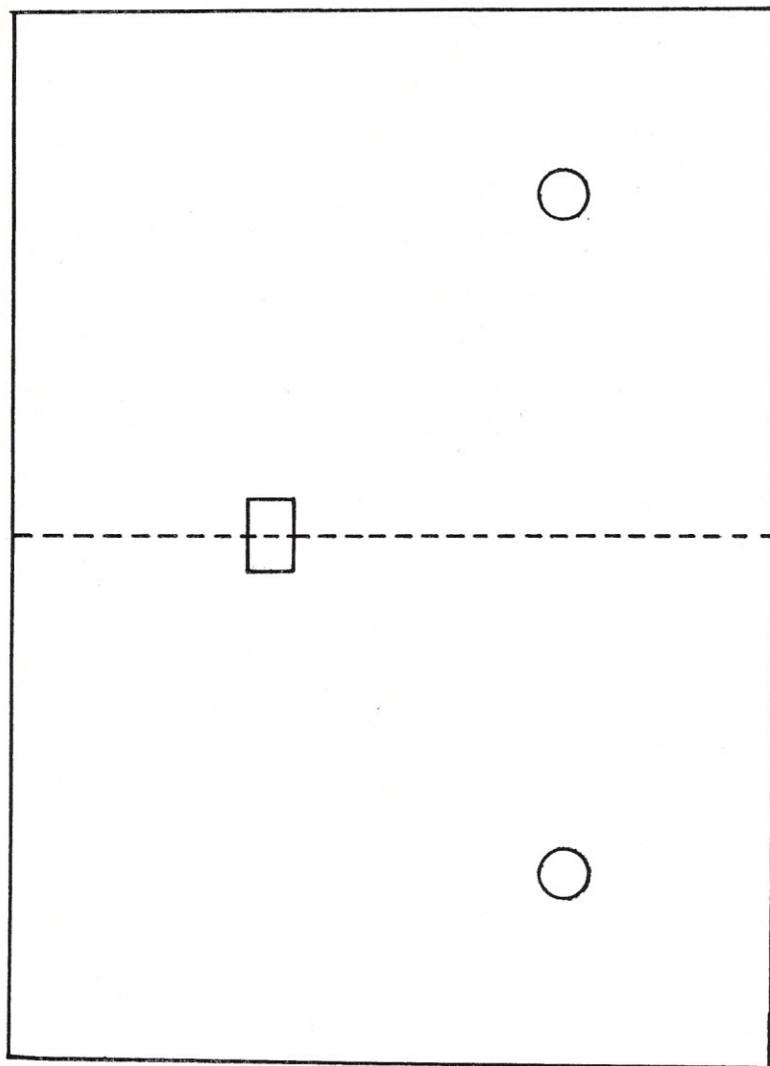


Figure 1. Template for creating "flippy" disks.

Copy the template onto a piece of stiff paper (a greeting card or the subscription card that comes in any magazine will do). Punch out the two registration holes, then fold it on the dotted line and punch the write-protect hole halfway into the folded edge. You will also need a small strip of stiff but smooth paper about 1-1/4" x 3-1/2".

Now, fold your template around the uncut edge of the disk envelope, aligning the top edge of it with the top edge of the envelope. The holes in the template should be straight across from their counterparts on the disk envelope. Mark the template hole positions with a pencil on both sides of the disk envelope, front and back, and remove the template.

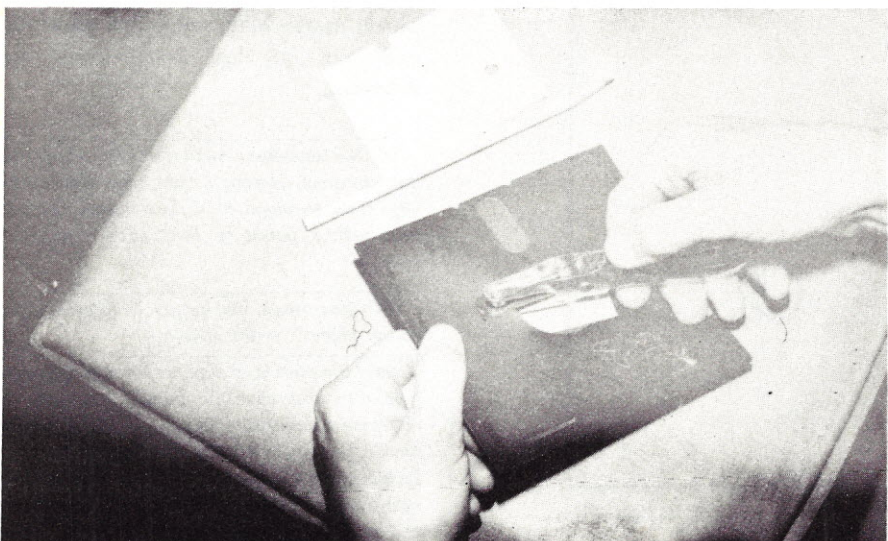
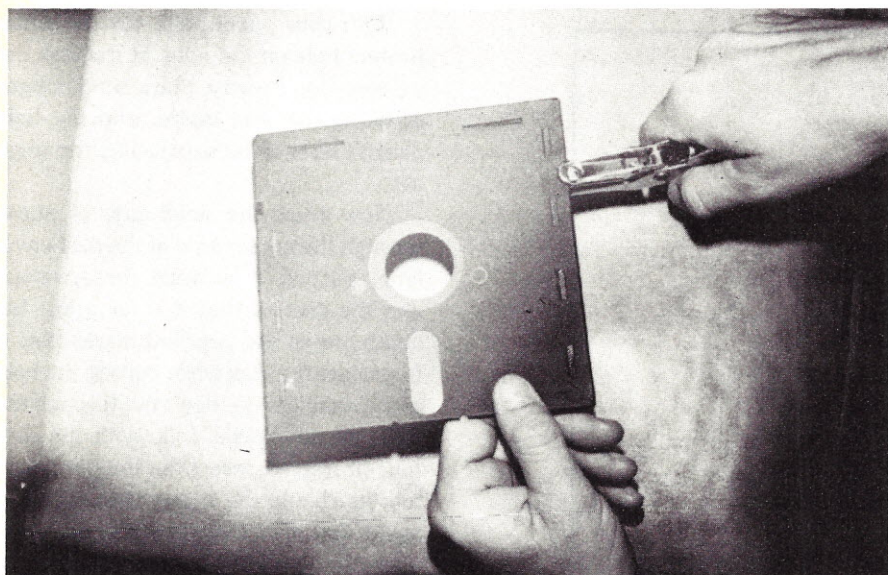
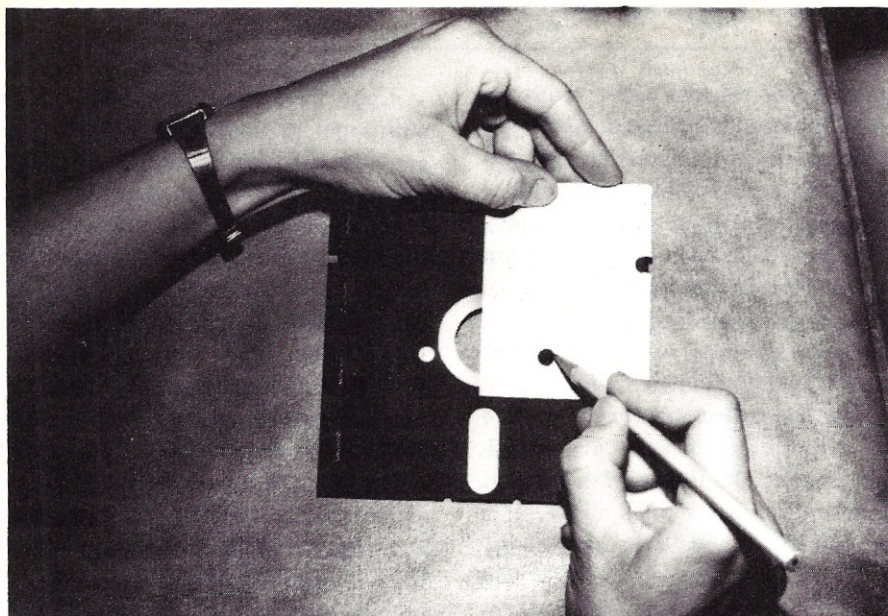
With your punch, bite out the write-protect hole on the edge of the disk envelope. Don't worry, there is no danger of biting the disk inside, and the hole doesn't have to be square like the original.

Now insert the small strip of paper through the center hole of the disk envelope, putting it between the envelope and the disk so that it is lying just beneath one of the penciled marks (this is to protect the disk while cutting the hole in the envelope — don't cut through the disk, whatever you do!). With the disk thus protected, insert the thinner jaw of the punch into the center hole, sliding it along the protective paper, and make your cut. This must then be repeated on the back side, where you made the other pencil mark. Make sure the punch-out does not get lost down inside the envelope.

Fold the template around the uncut edge of the disk envelope, aligning its top edge with the top edge of the envelope. Mark the template hole positions with a pencil on both sides of the disk envelope.

With your punch, bite out the write-protect hole on the edge of the disk envelope.

Insert the small strip of paper through the center hole of the disk envelope, putting it between the envelope and the disk so that it is lying just beneath one of the penciled marks. With the disk thus protected, insert the thinner jaw of the punch into the center hole, sliding it along the protective paper, and make your cut.



Now, with CP/M in drive A, put your floppy in drive B, flip side up, and format it. If it works, you've got yourself another side. If it doesn't, all you've lost is a little time.

A Paper Table

The following is an amateur carpenter's answer to hi-tech acrylics.

If you use form-feed paper in your printer, this might come in handy. It straddles the stack of paper behind your printer and catches the printed sheets as they come out of the machine. The dimensions will be determined by your own setup, but essentially it consists of a piece of masonite on four legs (furring strips work fine), high enough to clear the top of your printer by about $3/4$ " and wide enough that the stack of paper fits between the legs.

Attach the legs in such a way that the front of the table overhangs the back of the printer, bringing it close to the paper coming out of the machine. Make a paper tray from a shirt box with one end opened and folded down to help catch the paper. As the paper reaches the back of the tray, the folds are forced back into it (sometimes with a little help from you), and you end up with a neat stack to remove from the printer.

Bookshelf Typing Stand

This project requires a little more woodworking skill, but it gives you a place to store your collection of *Portable Companions* and other books, plus a typing stand that takes up no table space.

Again, the dimensions will vary according to each setup, but essentially this is merely a box with a hinged front. Mine is made from pine boards and is 9" deep, 11" wide, and $13\frac{1}{2}$ " tall. A piano hinge across the front of the box top holds a triangular piece of wood from which the typing stand hangs. This is at a 30-degree angle to the front of the box, allowing the bookshelf to sit squarely on the table while bringing the reading material into view. You may want a different angle — experiment before making any cuts.

User Groups

Likewise for the slant of the typing shelf — mine is 35 degrees off vertical, and I find it ideal. To gain access to the books, simply lift the shelf out of the way. If you attach it right, it will fold right back on top of the bookshelf.

Roderic Knight is president of the ^OB^OS Group in Oberlin, Ohio.

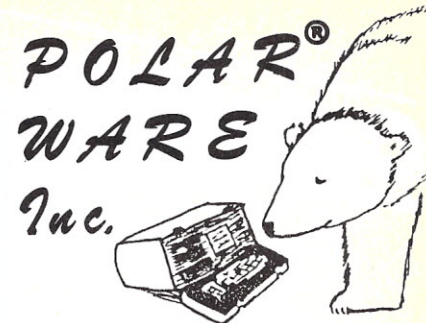
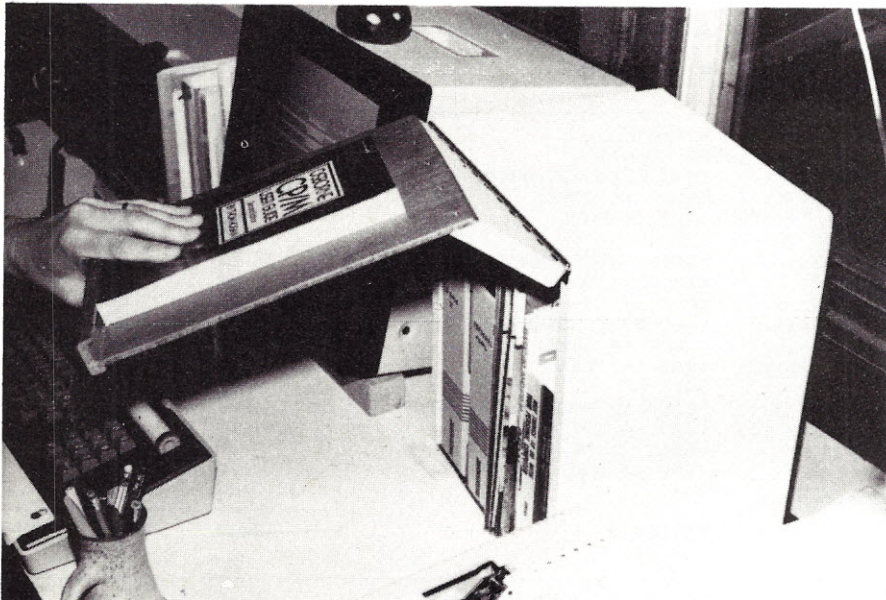
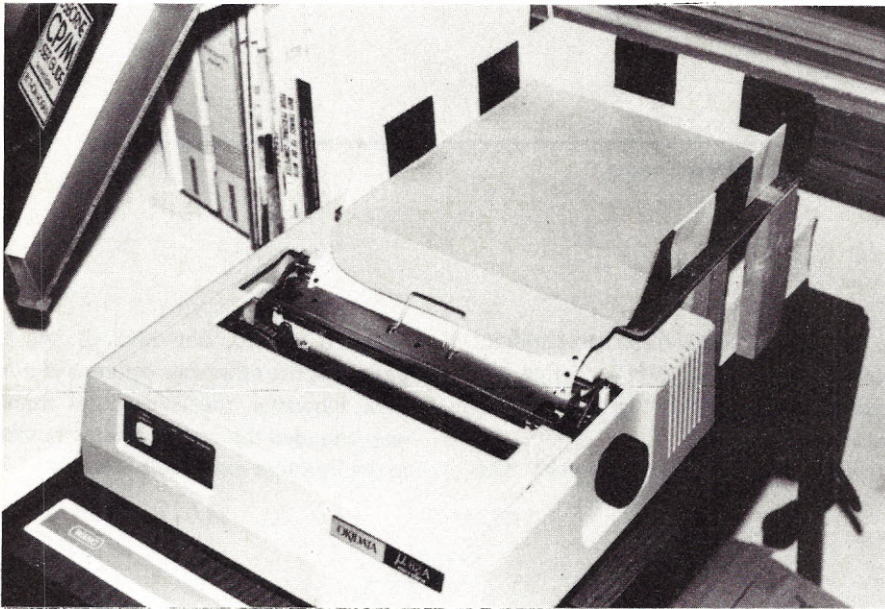
A simple masonite paper table with a shirt box as a paper tray.

A do-it-yourself bookshelf and typing stand.

Portable Companion would like to hear from your user group. Send us your user group's name, a contact name, your group's mailing address and any information for newcomers, including when your group usually meets.

Send a copy of your newsletter, if you have one, and any suggestions you have for this section of the magazine, including any articles that you think are appropriate, to:

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Travel Expense Spreadsheet

Sanford Gerstel

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The travel expense spreadsheet presented here is programmed to plan and keep a record of vacation, business, or business/vacation trip expenses. Such an analysis will help avoid cash shortages while away from home, and assist you in preparing logical and accurate business trip expense statements.

To get the maximum benefit from this article, create the SuperCalc file TRAVEL1, shown in figure 2. Figure 3 shows the spreadsheet after you load it using SuperCalc (/Load TRAVEL1, A11). Figure 1 shows the spreadsheet with the data we manipulate in this article to show the spreadsheet's features.

TRAVEL1 is an itinerary and expense analysis of a 15-day combined business/vacation trip, showing the date, expense item description, actual expenses, business portion of expenses, and amounts of business expenses reimbursed by the traveler's firm. Notice that all numbers are entered and formatted as integer (no cents).

Change the actual air fare amount from 480 to 550. Notice the immediate change in other numbers.

Change the actual Reno hotel amount from 600 to 750. Again, notice the change in the other two columns of numbers.

When the air fare amount was

changed to 550, 550 immediately appeared in the other two columns of numbers. However, the Reno hotel change only changed the corresponding number in the business expense column.

	A	B	C	D	E
1					
2					
3					
4					
5	FILENAME:TRAVEL1				
6					
7	EXPENSES OF BUSINESS/VACATION TRIP TO NEVADA/ARIZONA, 10/29-11/12/84:				
8					
9	DATE	EXPENSE ITEM	ACTUAL	BUSINESS	REIMB
10			COST \$	EXPENSE	BY CO.
11					
12	10/29	AIRFARE	480	480	480
13	10/29-11/12	CAR RENTAL	580	425	425
14	10/29-11/2	RENO HOTEL (5 DAYS)	600	600	600
15	10/29-11/2	MEALS (5 DAYS)	200	200	150
16	10/29-11/2	TIPS (5 DAYS)	20	20	0
17	11/2	GAS	20	20	20
18	11/3	MOTEL WHILE TRAVELING (1 DAY)	75	75	75
19	11/3	MEALS (1 DAY)	30	30	30
20	11/3	GAS	20	20	20
21	11/4-11/7	LAS VEGAS HOTEL (4 DAYS)	600	600	480
22	11/4-11/7	MEALS (4 DAYS)	200	200	120
23	11/4-11/7	TIPS (4 DAYS)	10	10	0
24	11/7	GAS	10	10	10
25	11/8-11/11	MEALS IN PHOENIX (4 DAYS)	120	0	0
26	11/8-11/11	TIPS (4 DAYS)	10	0	0
27	11/12	MEALS (1 DAY)	30	30	30
28	11/12	TIPS (1 DAY)	5	5	0
29	11/12	TAXI	20	20	20
30					
31		TOTALS	3030	2745	2460

Figure 1

Figure 1. The travel expense spreadsheet with data.

I	A	II	B	II	C	II	D	II	E	I
11										
21										
31										
41										
51	FILENAME:TRAVEL1									
61										
71	EXPENSES OF BUSINESS/VACATION TRIP TO NEVADA/ARIZONA, 10/29-11/12/84:									
81										
91	DATE	EXPENSE ITEM	ACTUAL COST \$		BUSINESS EXPENSE		REIMB BY CO.			
101										
111										
121	10/29	AIRFARE	480		C12		D12			
131	10/29-11/12	CAR RENTAL	580		11/15*C13		D13			
141	10/29-11/2	RENO HOTEL (5 DAYS)	600		C14		IF((5*120))D14,D14,5*120)			
151	10/29-11/2	MEALS (5 DAYS)	200		C15		IF((5*30))D15,D15,5*30)			
161	10/29-11/2	TIPS (5 DAYS)	20		C16		0			
171	11/2	GAS	20		C17		D17			
181	11/3	MOTEL WHILE TRAVELING (1 DAY)	75		C18		IF((1*120))D18,D18,1*120)			
191	11/3	MEALS (1 DAY)	30		C19		IF((1*30))D19,D19,1*30)			
201	11/3	GAS	20		C20		D20			
211	11/4-11/7	LAS VEGAS HOTEL (4 DAYS)	600		C21		IF((4*120))D21,D21,4*120)			
221	11/4-11/7	MEALS (4 DAYS)	200		C22		IF((4*30))D22,D22,4*30)			
231	11/4-11/7	TIPS (4 DAYS)	10		C23		0			
241	11/7	GAS	10		C24		D24			
251	11/8-11/11	MEALS IN PHOENIX (4 DAYS)	120		0		IF((4*30))D25,D25,4*30)			
261	11/8-11/11	TIPS (4 DAYS)	10		0		D26			
271	11/12	MEALS (1 DAY)	30		C27		IF((1*30))D27,D27,1*30)			
281	11/12	TIPS (1 DAY)	5		C28		0			
291	11/12	TAXI	20		C29		D29			
301										
311		TOTALS	SUM(C11:C30)		SUM(D11:D30)		SUM(E11:E30)			

Figure 2. Formulas for the spreadsheet in figure 1. Expense descriptions and amounts are filled in.

Look at figure 2 to see the formulas used in the TRAVEL1 worksheet. The formulas in cells D12 and E12 specify the entire air fare to be a business expense, reimbursed in full to the traveler. The IF formula in cell E14 (Reno hotel expenses reimbursed by company), however, places a reimbursable ceiling of \$120 per day on hotel costs reimbursed to the traveler. (The IF formula is also used to place a reimbursable ceiling on meals.)

Clear your screen, and load TRAVEL1 into your SuperCalc workspace to create a new travel plan. Your spreadsheet should have blank columns as shown in figure 3. Change or enhance the formulas if you want to correspond to your situation. For example, you might want to add a column headed No. of Days and change the formulas to include the corresponding No. of Days amount as a variable.

I	A	II	B	II	C	II	D	II	E	I
11										
21										
31										
41										
51	FILENAME:TRAVEL									
61										
71	EXPENSES OF BUSINESS/VACATION TRIP TO									
81										
91	DATE	EXPENSE ITEM	ACTUAL COST \$		BUSINESS EXPENSE		REIMB BY CO.			
101										
111										
121					0		0			
131					0		0			
141					0		0			
151					0		0			
161					0		0			
171					0		0			
181					0		0			
191					0		0			
201					0		0			
211					0		0			
221					0		0			
231					0		0			
241					0		0			
251					0		0			
261					0		0			
271					0		0			
281					0		0			
291					0		0			
301					0		0			
311		TOTALS			0		0		0	

Figure 3. The travel expense worksheet with columns B and C left blank for you to plan your trip.

Recovering Damaged dBASE II Files

John Gaudio

© 1984 John Gaudio

Have you ever spent hours entering information with dBASE II, edited 50, 100, or maybe 500 records, and then found that the information you just put in seems to have vanished? I had one client that couldn't get to the last 800 or so of the 807 names and addresses on his list. Getting to only seven of over 800 names was not very satisfying.

Problems like these generally come up when people either fail to leave dBASE II properly, or when they change disks without taking the proper precautions. Here are a few tips on avoiding these problems, and a possible solution for those of you already in trouble.

The rules to live by are:

- 1: Always use the QUIT command when you're finished running dBASE II. This insures that all files are properly closed.
- 2: Never remove a disk before quitting without first executing the USE command. This closes the database file in use. If you're using primary and secondary databases on the disk to be changed, make sure you execute USE for both databases. The alternative is to use the CLEAR command, but remember that this will also clear

your memory variables. See the SAVE command if clearing these memory variables is a problem. To keep things simple change only the disk in B:, and put any command files, (if you use them) on the disk in drive A whenever you can.

- 3: Always use the RESET command after changing disks. (Notice that's the RESET command, not the reset button!).

Following these rules will go a long way toward keeping you out of trouble, but once in a while even the best of us mess up. If this happens to you, and your backup copy doesn't save you, you may want to try patching your database. To do this we need to know a little more about the way a dBASE II ".DBF" file is set up, and have some idea of what typically goes wrong.

There are two major parts of a database ".DBF" file. The first holds the number of records, the date that the file was last modified, and the names, types, and sizes of all the fields used in that database. The second part contains all of the records, the actual information you're keeping track of.

The most common problem I've run into involves the location where dBASE

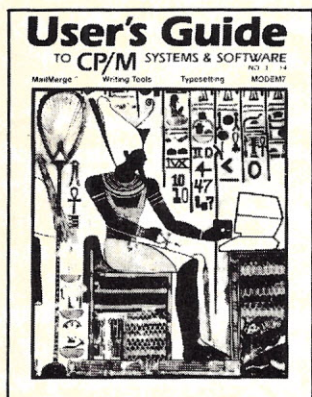
stores the number of records in the database. Getting out of dBASE II the wrong way can cause this number to be considerably smaller than the true number of records, even though all those records are still in the second part of the file. When this happens the OUT OF RANGE error appears whenever you try getting to more records than dBASE thinks it has. The solution to this problem involves patching or changing the file so that the location holding the number of records holds a big enough number. In most cases this can be done with WordStar in the non-document mode.

Let's consider a specific example, say B:LIST.DBF, with 50 records. Unfortunately the number 15 has somehow gotten into the location for the number of records, and so we can only get to the first 15 names on our list. The second and third characters in a database file make up the code that tells dBASE how many records are supposed to be in that database. To patch this code in your database file:

- 1: Make a copy of the damaged file and work only with the copy. You don't need to get yourself into any more trouble.
- 2: Use WordStar in the non-docu-

continued on page 75

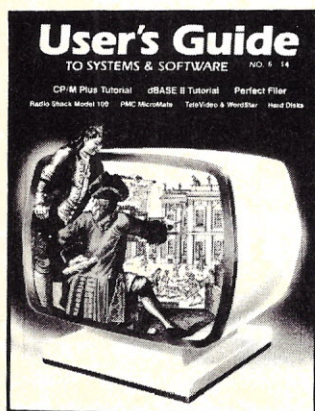
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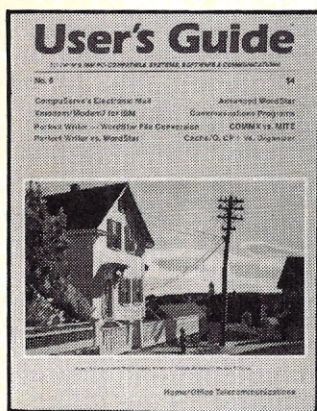
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— Jerry Pournelle, *Byte* Dec. 1983

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Portable

New Products

New Product information is derived from press releases sent to The Portable Companion by the producing companies. Statements of fact or opinion expressed in the new product announcements in this section are those of the producing company. We are not able to check these statements for accuracy, nor have we evaluated these products, although we are planning to evaluate many of them.

Voice Advisory System

The HSA-70 Voice Advisory System is designed for a variety of residential, commercial and industrial applications where full-time local or remote monitoring is required. The Z80-based programmable system is capable of analyzing up to 40 variables, and can be used as a stand-alone monitoring system or in conjunction with other systems.

As an integral component in OEM applications, a variety of conditions can be monitored: contact, fluid level, torque, temperature, moisture, motion, electromagnetic radiation, weight, position, RPM, acceleration, gas, atmospheric pressure, vibration, flow rate, viscosity, and electrical current/voltage.

For more information, contact Arctic Data Corporation, 1839 1st Ave., Prince George, B.C., V2L 2Y8 Canada; (604) 562-5240.

General Ledger

Arctic Data Corp.'s General Ledger system is now available for a variety of CP/M and MS-DOS computers, including the Osborne. The system uses menus

and prompts to guide you through all phases of installation, operation and report generation. No run-time module or additional licensed software is required.

The system provides extensive reporting capabilities that can be tailored for your business. Spreadsheet capability is also provided to do budgeting and financial modeling.

The General Ledger system is available as a stand-alone package or as part of a completely interactive accounting system with: Canadian Payroll, Accounts Receivable, Accounts Payable, and Order/Entry-Inventory. For more information contact Arctic Data Corporation, 1839 1st Ave., Prince George, B.C., V2L 2Y8 Canada; (604) 562-5240.

Legal Forms on Disk

MicroCost Software announces the availability of its LawForms Series of legal forms on disk. Forms include simple wills; real estate forms; divorce forms; civil litigation forms (two volumes); collection forms; probate, adoption & guardianship forms; for profit corporate forms; non-profit corporate forms; and partnership & proprietorship forms.

For more information, write to MicroCost Software, 19705 1st Ave. S., Seattle, WA 98148.

Osborne "Typewriter"

Typewriter is a program that gives you immediate control of your printer from your Osborne keyboard. Your arrow keys can move the print head left or right, up or down. You can type text and

print it directly from the keyboard as a typewriter.

Typewriter also lets you change the spacing of your printer to whatever you want, including graphics plotting density. Your arrow keys, as you move them in graphics mode, print dots directly, turning your printer into a graphics plotter.

Printers supported include all Diablo daisy wheel and dot matrix models, Epson models, Gemini models, the C-ITOH F10-40 Starwriter and Prowriter, the NEC Spinwriter, Okidata models, and Tally printers.

Typewriter makes it easy to do things like addressing envelopes or printing graphic images without writing a program or saving text in a disk file.

For more information, write to MicroCost Software, 19705 1st Ave. S., Seattle, WA 98148.

Hardwood Stands For Printers & Monitors

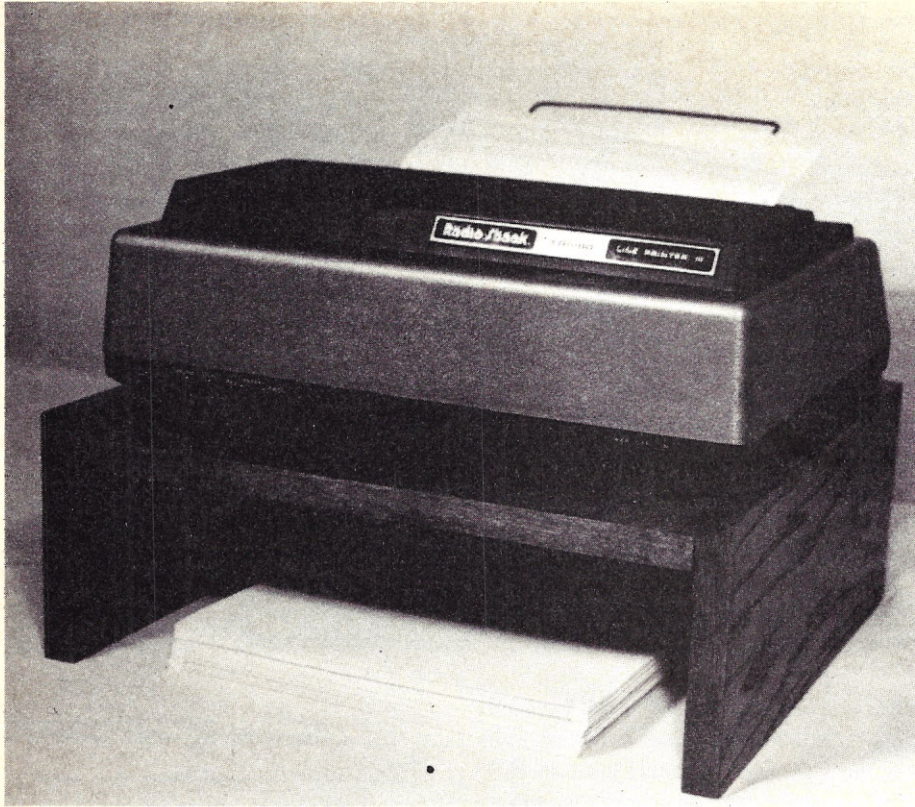
Woodtec announces a series of hardwood veneered, all wood printer and monitor stands for computer equipment. The line includes printer stands for both letter-size printers, such as the Epson FX-80, and the wide-carriage printers like the Epson FX-100. Monitor stands are available for all popular computers, including an extra-high model for the Osborne 1 or Executive (see photo).

The desktop units are of furniture quality hardwood veneers with all joints glued for extra strength and resistance to vibration. They are available in walnut, teak or oak finish stains and come completely assembled and ready to use. Prices start at \$38.95 (freight included to continental US) for a 16.5" wide stand for letter-size printers.

For further information contact Woodtec, 320 W. Maple, Box 445, Arkansas City, KS 67005; (316) 442-7000.

Address Organizer

TMS Consulting offers Master Address List (MAL) and Business Address

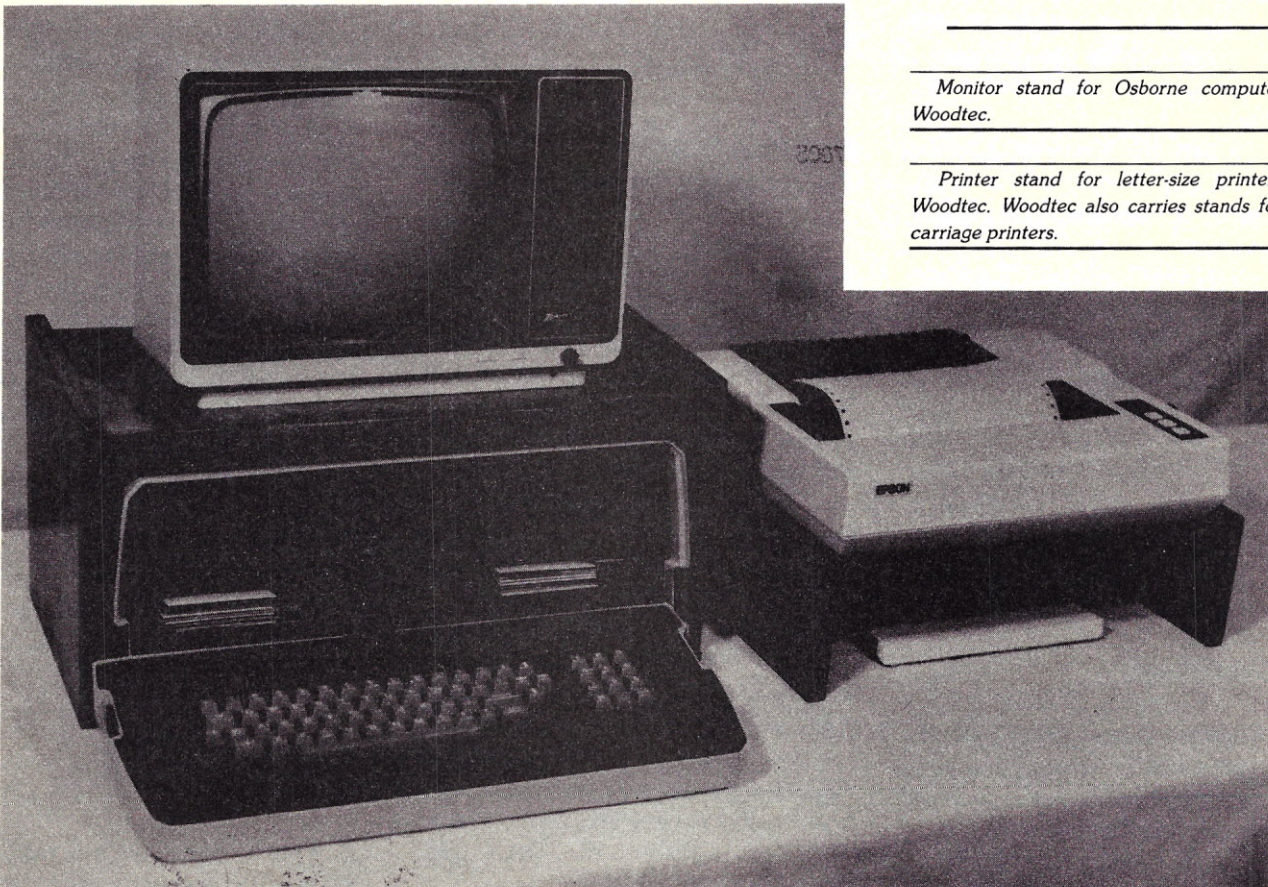


List (BAL), two addressing programs that run under dBASE II[™] (Ashton-Tate). MAL and BAL automate many of the functions of keeping and using mailing lists. The advantage is that the names from different lists, up to 500 names total, can be kept on one, convenient file disk and "marked" according to category. You can use up to ten categories with MAL or BAL.

When printing out the entire list, or any category lists, MAL and BAL gives you a choice of either alphabetical or zip code order (for bulk mailing). Either program will print individual names and addresses on a 4" by 6" postcards, mailing labels, or labels for Rolodex card use. Also, the lists are convertible to the WordStar/MailMerge[™] (MicroPro Intl.) format.

The BAL program provides places for the names of companies and important contact persons. MAL, for personal addresses, has spaces for names of children. Each program costs \$29.95. The programs require dBASE II.

For more information write to TMS Consulting, P.O. Box 556, Glenside, PA 19038 (PA residents add 6% sales tax).



Monitor stand for Osborne computer from Woodtec.

Printer stand for letter-size printers from Woodtec. Woodtec also carries stands for wide-carriage printers.

Utilities For OI and Executive

CompuMagic, Inc. has released the CMAUTO+ package of six programs designed to make the Osborne 1 computer easier to use. Four of the programs (CMAUTO, WordCount, DoubleSpace and TYPIT) can also be used on the Osborne Executive.

CMAUTO generates a program to run other programs. You can use it to produce AUTOST (auto-start) programs and to do things SUBMIT won't allow. CMAUTO lets you change logged disks and user areas with one command, letting you automatically log on a new disk while using WordStar® (MicroPro Intl.) or SuperCalc™ (Sorcim).

WordCount counts the words in a file or in a number of files. DoubleSpace lets you edit a text file in WordStar's single-space mode and then convert the file to double-space mode for printing.

TYPIT lets you output a line at a time from your Osborne to your printer or to a file. TYPIT does not send the line until you press Return, allowing you full editing of each line.

SSIZE lets you change the Osborne 1 scrolling setting, and if you have the 80-column upgrade, it lets you change the screen width. It will run from within WordStar.

RS232 sets the Osborne 1 serial port's baud rate, number of bits, parity and number of stop bits from a single command line.

The CMAUTO+ package is \$24.95 including documentation, and is available from JMM Enterprises, 115 Battersby Road, Enumclaw, WA 98022; (206) 825-1637. The package is also available from SUDDEN! Products Group, 3421 M Street NW, Suite 1336, Washington, DC 20007; (202) 338-9256.

Bar Code Reader

PERCON announces the E-Z-READER bar code reader which can read a wide range of bar code densities — from wide dot-matrix to fine labels.

The E-Z-READER reads Codabar, and decodes and transmits Code 3 of 9



and Interleaved 2 of 5. UPC will be available this summer. The E-Z-READER connects to any computer with an RS-232 interface and costs \$495. An operation and installation manual is available separately for \$20.

For more information contact Peripheral Connections, 2190 W. 11th St., Eugene, OR 97402; (503) 344-1189.

The E-Z-READER bar code reader from PERCON.

Practical Solution To Computer Frustration

A nationwide organization called the Society for the Prevention of Cruelty to Prospective Computer Purchasers (SPC-PCP) is forming to help individuals solve perplexing computer and software problems. The organization is putting together lists of experienced volunteers who are willing to help new users, and then it will advertise in major publications that such a list exists, and anyone may send for a list of local helpers for a small fee (to cover the ads).

The response from the technical community is enthusiastic, since volunteer helpers can establish good relationships with purchasers of computer equipment.

Anyone wanting to volunteer to help neophyte computer users in their area should write to SPC-PCP, attn. Burton Bhavisyat, Route 1, Box 318, Moundsville, WV 26041.

CALENDAR/1 for Osborne 1

CALENDAR/1, now available for the double density Osborne 1, is a CP/M-80 program that prints and displays calendars of events in the familiar graphic monthly calendar format. Use it as an appointment book and production schedule for one or more tasks/people. Multiple calendars can be merged into a master calendar. Files of annual events can be merged with files of current one-time-only events. Tailor your calendar to fit your needs by using the Parameter File to set all options and defaults (different sizes and formats for your calendar, printer characteristics, etc.).

For more information contact Clear Systems, 607 Ashland Ave. #A, Santa Monica, CA 90405, (213) 394-7740.

Software Writer's Marketplace

Running Press has just published a 228 page paperback book for software

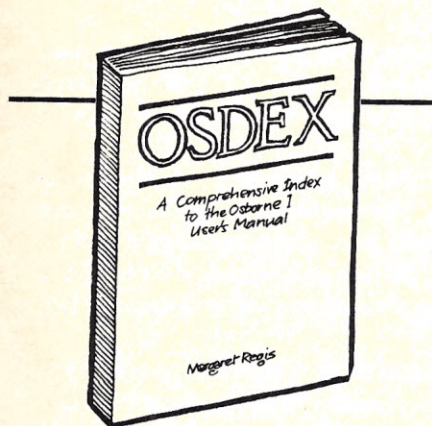
writers. *Software Writer's Marketplace* includes instructions on researching the market, structuring commercial programs, writing documentation, and other software development tasks.

Software Writer's Marketplace also covers the task of selling the developed product — from the initial query letter to negotiating and signing contracts.

Over 500 software buying companies are listed. Listings include name and address of the software buyer, types of software wanted (language, format, operating system), business details (rights purchased, payment policy, who to contact), and a brief description of each company and the products they offer.

Software Writer's Marketplace is by Dennis Joyce and John Earl Pickering, M.D., two successful software writers.

Contact Running Press Book Publishers, 125 South Twenty-Second St., Philadelphia, PA 19103, (215) 567-5080.



Osborne "Bluebook" User's Manual Index

OSDEX is a 64 page (over 2000 entries) index to the Osborne 1 blue cover User's Reference Guide. OSDEX lists items by name and by description with a cross-reference index that helps you find information fast. OSDEX is available from Periscope Press, PO Box 6926, Santa Barbara, CA 93160 for \$9.95 each (CA residents add \$.54 state sales tax per book). If not satisfied for any reason, return your OSDEX within 10 days for a full refund.

Continued from page 70

ment mode to edit the file, in this case B:LIST.DBF.

- 3: Change the third character in the file to a lower case z. Be very careful not to change anything else, and make sure you don't just insert the z without removing whatever character (usually a ^@) was there to start.
- 4: Use ^QC and ^KD to go to the bottom of the file and to save the patched version of your file.

You have just told your dBASE file that it's holding over 31,000 records. If the true number is larger than 31000 (I doubt too many of your databases fall into that category) then let me know (write me care of *Portable Companion*) and we'll take a more general, and more complex approach, in most cases though the approach above will work.

Sometimes, for example when the dBASE file thinks it has 26 records, WordStar won't load the whole file. Again this typically happens only one time in 256, so it's not usually a problem. When it does occur a more complex solution is available using programs like DDT and DUU.

Once your file is patched, run dBASE and USE the patched file. Create another file using the commands:

```
SET DEFAULT TO B ␣
USE LIST ␣
COPY STRUCTURE TO FIX ␣
USE FIX ␣
APPEND FROM LIST ␣
```

Since dBASE thinks it has over 31,000 records it will append these records until it can find no more data. At that point it will stop and you'll have a working database file with access to all your records.

Follow the rules laid out above and you may be able to stay out of the doghouse. If that fails try fixing your database to get out of the doghouse. Good luck.

This article first appeared in the "From The Doghouse" section of the DOG BYTES, the publication of the Denver Osborne Group.

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If you encounter problems with a product, first attempt to resolve the dispute with the supplier or manufacturer. If you continue to have problems, please WRITE to us, describing in full what has happened and what attempts you've made to resolve the problem. Please include a phone number where you can be reached during business hours. While we can't promise that we'll settle the matter for you, we do regard the advertising in this publication as a service to our readers, and therefore, closely monitor complaints and criticisms concerning our advertisers.

We're Back!

We've got the votes. We at Osborne Computer Corporation will emerge from Chapter 11 this summer and move forward with our reorganization plan.

93% of the 200 voting creditors approved the reorganization plan. Of these, the secured creditors and people with stock options were unanimous in approval of the plan. Of the largest group, the unsecured creditors, 95% approved the plan. Shareholders were 84% in favor.

We are beginning to implement solid plans to continue supporting Osborne users and new customers. Plans are being formulated and orchestrated by our new Director of Sales, Fred Schmidt. Fred has many exciting programs that will be revealed to you over the coming months.

We truly appreciate the support from user groups. I met with some user groups recently, giving the keynote speech at the First Osborne Group (FOG) annual meeting and Chicago officers' installation, and holding a telephone conference with the First Rochester Osborne Group (FROG) in NY. Coming up are trade shows in Wichita, Kansas, and user group meetings in Los Angeles, Vancouver and Victoria, British Columbia.

We are gratified by the response and the warm reception we received at the recent West Coast Computer Faire in San Francisco and the Hanover Fair in West Germany. We are also very pleased with the very positive reaction to the *Portable Companion*.

We at OCC extend our thanks to everyone who is participating in OCC's reorganization and to those who are helping to make it possible for Osborne Computer Corporation to continue to support its customers.

Ronald J. Brown
President & Chief Executive Officer
Osborne Computer Corporation
June 15, 1984

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